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DREAMS

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PLAYERUNKNOWN'S BATTLEGROUNDS
LOST SPHEAR
ARENA OF VALOR
CELESTE

#316
MARCH 2018



Lock it, fill it, call it, find it, view it, code it, jam, unlock it

When he unveiled *LittleBigPlanet* at GDC in 2007, Phil Harrison described it as being at the vanguard of a new movement called Game 3.0. Version 1.0, he said, was the PC floppy disk and console cartridge, and 2.0 added online play. Game 3.0 was about sharing. At the time, it felt like a buzzword. Looking back, however, it's clear he was onto something.

After all, this issue finally yields a review of *Playerunknown's Battlegrounds*, a game that wouldn't exist without the mod scene and whose success can be in large part attributed to its popularity among Twitch streamers. In Pushing Buttons, we speak to a new breed of developers and broadcasters who are subverting our expectations of how games are played, be it with a one-of-a-kind museum piece or a YouTube video of *Overwatch* being played on a banana. Elsewhere we check in on what Unity, one of the most popular game-development platforms on the planet that's used all over the world, from big studios to tiny bedrooms, has planned for its millions of users in 2018.

Harrison's 'Game 3.0' may not have stuck around, and not everything he predicted that day in 2007 came to pass (he also announced PlayStation Home, and we all know how that turned out). But the 'Play, create, share' tagline with which *LittleBigPlanet* will be forever associated is so in tune with the gaming zeitgeist in 2018 that it wouldn't look out of place on a new **Edge** masthead. Games these days are about so much more than just play; they are defined by what you can do in them, the people with whom you can play them, and the audience with which you can share the results.

LittleBigPlanet felt brave and risky back then; today, *Dreams* feels thoroughly of the moment, an all-purpose creation tool that takes the flexibility of a powerful game engine and tunes it elegantly to the PS4 controller, then makes sharing your work – or borrowing others' – easier than ever. It is contemporary, and astonishing. Our story begins on p60.







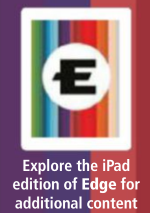


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Remote control

How a French startup is revolutionising cloud gaming by giving every user their own remote PC

Blade's co-founder and CEO, **Emmanuel Freund**, gets right to the point. "Even for me, cloud computing – cloud gaming, whatever – has been shitty," he says. "It hasn't been working, let's be clear; if it was working then everybody would have cloud-gaming stuff."

Freund's company has been running its cloud-computing service, Shadow, in its native France since the middle of 2016. Now, ahead of the service's rollout in the UK and US, Blade faces the challenge of differentiating Shadow from a legacy of similar products that, at best, have achieved limited success. Like OnLive or PlayStation Now, Shadow provides users with access to games from any device with a screen and an internet connection. Unlike those services, however, Shadow's offering isn't limited to a provider-approved catalogue of games. Instead, Shadow provides remote access to a powerful PC with a top-end Nvidia GPU, 12GB of RAM, 256GB of storage and a Windows 10 installation – and that's it. Users are free to do whatever they want with their Shadow PC from that point, including installing games from Steam or other download services, browsing the Internet, working – anything and everything a PC can be used for, really. Each user is guaranteed access to their own machine whenever they want it.

"The biggest threat we had to face was the failure of other services." Freund says. "That's why everyone had a shitty image of the cloud – even me. I mean, the cloud? Come on. I use Spotify, I use Netflix, I use whatever, but for my PC? The cloud? No. That's only because they tried to sell a service that was not working fully." Freund is keen to stress – and to demonstrate – that Shadow is different.

"Normally in cloud gaming, or cloud computing in general, you're talking about mutualisation," he tells us. "You try to fit as many users as possible on one server in order to not spend a lot. Here, we'll give a full computer to every user. That's one of the things that will be allocated to you and not to anybody else. That will be dedicated to you during your usage. But as soon as you stop using it, it can be used by somebody else."

> "Here, we'll give a full computer to every user. That will be allocated to you and not to anybody else"

Where previous cloud-gaming services have charged the sort of subscription fee typical of Netflix or Spotify, Shadow's pricing model is more akin to a smartphone contract. European users pay 45 a month, or 30 if they commit to 12 months in advance. Spaces are limited, with the doors opened to new users whenever availability in Shadow's data centres permits. The service currently has 15,000 users in France, with expansion to the UK kicking off as you read this. Blade has also recently established a data centre in California, marking the beginning of a US rollout that is expected to take place over the next six months.

We're shown Shadow working in multiple contexts at Blade's Paris headquarters (where, Freund is keen to emphasise, the internet connection is "absolutely shitty"). First on the agenda is streaming content to a PC monitor via the Shadow Box, a small standalone unit intended as a replacement for your existing PC. The Box consists of four USB ports, two HDMI ports, an ethernet port and audio jacks. Anything users connect to the Box is treated as if it's connected to the machine in Shadow's data centre. The image quality is crisp, both while using the machine as a desktop PC and playing *Rise Of The Tomb Raider*, with no noticeable input lag – although, it should be stressed, *Tomb Raider*'s heavy use of scripted animations make lag less apparent than it would be in a strategy game or FPS.

Although Blade recommends a 15MB broadband connection for getting the most out of Shadow, Freund contests that the failure of the previous generation of cloud-computing services was not wholly due to inconsistent connectivity. "It's not totally true," he says. "The main networks are fibre. The problem is the last mile. If you go from Paris to Marseilles, it's five milliseconds. The input lag on a computer, for example, is normally 40 milliseconds. If you look at other cloud services, the main issue was that it was taking something like 50 milliseconds just to capture and encode the image. Our technology – we have some patents on some specific things – achieves encoding of the image in less than ten milliseconds. It gives us a huge advantage in terms of latency."

The same demonstration is then loaded onto a tablet, MacBook and smartphone in quick succession, with additional support for touchscreen features such as pinch-to-zoom. An Xbox controller, connected via Bluetooth, allows the game to be controlled on the phone, with the game-state transitioning seamlessly between devices – the core machine you're connecting to doesn't change, simply the screen being used to ▶

POWER UP
As part of your Shadow subscription, Blade promises to offer continual hardware upgrades. When Nvidia releases a top-end graphics card, Shadow users will get access to it. "In two years, your [personal] computer will slowly start to be outdated," Freund says. "You have to have a new CPU, or other new hardware, and games start to be more and more demanding. This is not the case [for Shadow]. This is a subscription computer, so it's totally up to date every time." The cost of these upgrades is accounted for by having users share hardware, and Blade is also planning to offer lower-spec machines at a reduced rate for users who don't need the latest high-performance hardware for gaming.



The Shadow Box can be rented for an additional monthly fee or bought outright. Requiring no cooling, it's entirely silent and consumes very little power





access it. In addition to being able to play games on the move, this also potentially acts as an alternative to Bootcamp for Mac users who want the option to use Windows for games. "Basically, you don't need a gaming console any more," Freund tells us. "Because you have a better PC than an Xbox, and you can play any game that you've bought on your TV with a controller. That's always been the vision: that you can access your PC from anywhere, and it will not change."

Given the controlled nature of this demonstration, we ask to see Shadow running in the wild. To that end we take a smartphone and an Xbox controller out to the street and attempt to use the service over a 4G connection. Remarkably, it holds together: we play several rounds of *Street Fighter V* outside, with minimal input lag, though there are a few noticeable pauses and frame drops. Even so, the quality of the performance would be sufficient to use the service for less latency-dependent games or programs (it likely would have been fine, ironically, for a slower singleplayer game such as *Tomb Raider*.)

There are obvious limitations to an offering like this. If your Internet connection is inconsistent, your experience with Shadow will be too (although Blade is working on improving the adaptive quality of the service). If your ISP has an outage, you can be left without a PC. If you let your subscription lapse then your data will be stored for 30 days, after which point it's at Blade's mercy – though the company says it is considering offering a cheap subscription option that will allow users to put their Shadow to 'sleep' if they're likely to not need it for a period of time. It's also natural to be wary of forgoing ownership of PC hardware in favour of renting it as a service, although this is a direction in which the industry is already moving. More and more software 'ownership' takes the form of digital libraries on Steam or PSN, and Shadow's price point undercuts the cost of buying, maintaining, and running a PC with this much power.



For fast-paced and latency-dependent games like *Street Fighter*, a speedy and reliable internet connection will be essential. That said, those who are serious about competitive gaming likely already have one

There's also the matter of privacy and data security. "We built the product with gamers," Freund says. "The first question was: 'How do I know that you're not looking at my computer? Specifically, at one in the morning when I'm doing something I don't want you to see?' It's not legal. Your data is yours. That's not like Google Docs, or whatever. We don't own your data. It's yours. It's private. We're going to jail if we ever look at what you're doing on your computer without your authorisation." Because Shadow gives users full control over a Windows installation, they are also able to secure their data in any way that they'd normally be able to. "You can put a password on Windows, and of course we won't know what it is. You can encrypt your data and we won't have the key to decode it." Freund explains that Blade's responsibilities as a service provider are similar to those of an ISP. If a court issues an order to serve up user data to the police, it will comply. "In the same way that a policeman will go to your place and ask you to hand over your computer," he says.

"We're going to jail if we ever look at what you're doing on your computer without your authorisation"

Nonetheless, Blade does monitor the hardware used to provide the Shadow service. This means that it has access to CPU, GPU, and network usage data – this wouldn't include what a user was doing, but would indicate when they were making use of the service. This information is necessary, Freund explains, in order to maintain the hardware. It also allows Blade to monitor for certain suspicious usages: users are prohibited, for example, from using Shadow to mine cryptocurrency, and keeping an eye on GPU load allows Blade to police the service without violating user privacy.

"The goal is for the product to be totally open," Freund says. "Not to be a library of games, not to only be able to play, or whatever. It's a computer. You need to be totally free on it. We explained to our community that if too many people are doing bad things, we'll be obliged to put policies in place. We want them to play along. Of course there will be assholes, but mostly users just play games. They play by the rules with us."

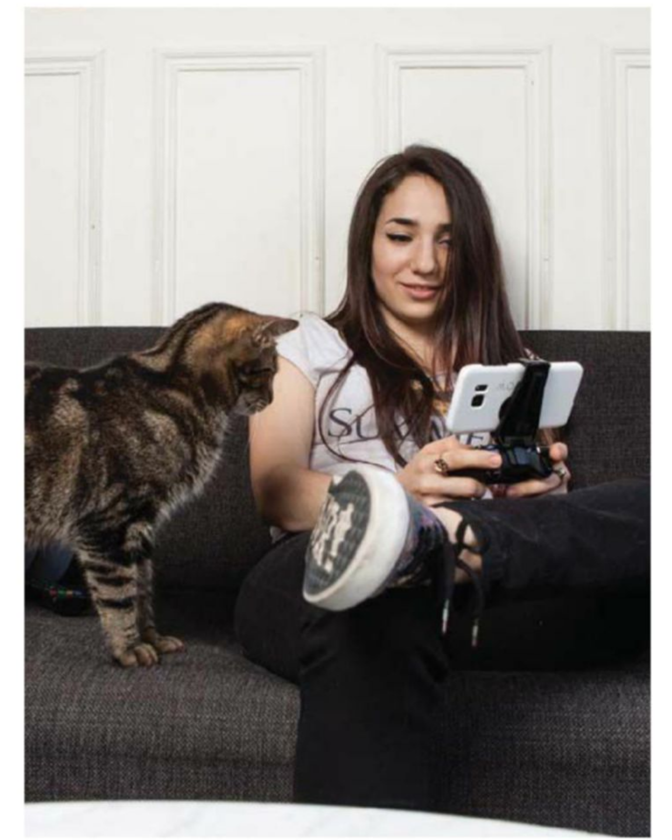
Blade wants to do for cloud computing what Tesla has done for electric cars: to take an on-paper good idea and be the company that makes it work. "Cloud computing will be the future of computers.

Being able to play graphically demanding games at the highest quality levels is central to Shadow's promise. Blade boasts support for 4K displays and 144hz monitors, although not both at the same time

We're passionate about that," Freund says. "We started to think: what about a world where you can replace not only the computer, but a smartphone, or anything, by having a device that is just a screen, but can have unlimited power, and a super-long battery?"

Cloud computing is also a potential solution to some of the tech issues surrounding VR, and Blade is actively investigating how its technology might be adapted to that end. "At this size," Freund says, indicating the coin-sized chipset fundamental to the Shadow Box, "you can stick it in the headset. You don't need a wireless headset: you can have the computer inside. It enables a lot of things. We're working on it. It will be ready when it's ready."

If Blade can make cloud computing work for gamers, Freund believes, then more widespread use of the tech will follow. This is the most demanding audience that the service will face – the most sensitive to failure, and the least forgiving of it. "When we started with the cloud, we saw that for everyone – enterprise, gamers, my mother – the cloud sucks. For different reasons, but, the cloud sucks. And we decided that if we were able to convince the most demanding guys first with a high-end PC, it proves that it's working. That cloud computing is a fact." ■



Offering the ability to play PC games on any device which has a screen, Shadow is being positioned as an alternative to Switch. However, the service has a clear advantage in providing access to desktop software that was previously unavailable on mobile



STORAGE WARS

Is 256GB of hard drive space enough?



While Shadow gives users access to a high-spec PC, one aspect of Blade's offering is notably lacking: available hard drive space. At only 256GB, a Shadow machine can hold far less software than an equivalent high-spec computer. Given that modern games can have a footprint in excess of 40 or 50GB, it's likely that you'll hit this limit quickly. The chief mitigating factor here is connection speed: Shadow's data centres boast internet connections in excess of 600Mbps, meaning that large games can be re-downloaded faster than they could be over a home Internet connection. Even so, this will likely encourage users to make use of other cloud storage services.

We must unite

It's one of the most popular game engines in the world. Where does Unity go from here?

Clive Downie is CMO of Unity, which retains a commanding position over the 3D game-engine market. It's a go-to for hobbyist developers, indie studios and beyond, and its featureset continues to grow: additions last year included a shader editor, native photogrammetry support, built-in cinematic tools and multiplayer netcode and server tools. But Unreal Engine 4 has also risen, sporting a similar low-cost business model but backed by Epic's technical reputation. Having previously worked at EA, Ngmoco, and Zynga, today Downie's job is to bring Unity's reputation up to match its capabilities and reach, while expanding its horizons beyond games.

What's it like working for a game-engine maker, having spent so long in mobile games?
Actually, it doesn't differ too much. At the centre of all of them is a passion for gaming, but also my own desire is, frankly, to only be involved in consequential things. I left EA to work with a good friend of mine, Neil Young, who founded Ngmoco. He realised early on that mobile was the next great domain for entertainment and I wanted to be part of that. We led the free-to-play mobile charge, and when DeNA made us their western division, it became about taking really smart Japanese mobile-gaming values and applying them to the west.

Did you feel Zynga reached the same level of consequence?
Four hundred million people played *Farmville* on Facebook, and I wanted to help Don Mattrick and Mark Pincus transition Zynga's greatness to mobile. In some degree we did that, but ultimately it's also a work in progress. These things take time. But then I got talking to John Riccitiello, who I knew from EA, and he outlined how consequential Unity was at empowering game creators, and that resonated with me. I hadn't thought about that side of the equation before.

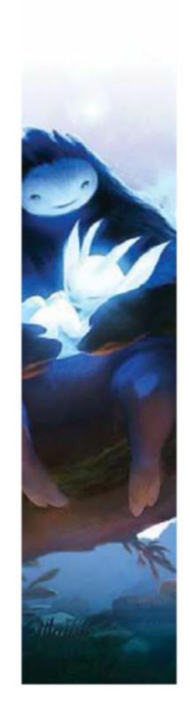
With the range of architectural differences between PC, console and mobile, is it a rising challenge to ensure Unity runs well everywhere?
We don't see it as a challenge, it's a commitment. One of the core tenets of Unity has always been, 'Create once, deploy anywhere'. We support over 30 platforms by investing in resources; we have large specific teams for platforms so we always understand new technologies and we're there with their launches. It's a simplistic answer, but it's real. Since I've been here, which is close to three years, Unity has gone from around 400 people to just over 1,500, and the reason is that we are dedicated to solving the hard problems.

> "Since I've been here, which is close to three years, Unity has gone from around 400 people to 1,500"

Unity still has a reputation, especially among consumers, that it's the cut-price and technically less proficient option. How do you deal with that?
Perception is reality, right? So it might not be true, but the fact that that perception is out there makes it a reality. Historically, the challenges with Unity around our rendering performance were pretty legitimate, but with Unity 5 we caught up immensely with our physically based rendering technology, and in Unity 2017 we introduced our VFX stack and continued to iterate on our graphical power. When you have such a large number of creators as Unity has, you have a spectrum from absolute beginners through to professionals. The volume of people who are beginners is such that it can create that perception in the world that Unity is only capable of amateurish work, when in fact people are just seeing the sheer volume of people using it and learning creativity. That's a great thing, and we'll always continue to foster it.



Clive Downie, chief marketing officer at Unity



Neill Blomkamp's Adam films are created in Unity. How big an opportunity do you sense there?
Game makers are at the cutting edge of realtime creativity, but in the last two years or so other industries have wondered if they could use realtime tools in their workflows. We've seen the organic use of Unity in film, the automotive industry, manufacturing, architecture and engineering, just because of the spectacular precedent set by game makers, so we're now working with different industries to determine how we can have a product for them that goes beyond their organic use of Unity. Adam is a proof-point to the film business that a fully CG realtime movie can exist at a quality level that rivals more traditional techniques that take longer. That movie took around five months of production time, and Neil told us that without realtime it would've taken at least double that. Virtual visualisation is something we're working with, too. For scenes in The Lion King, Blade Runner and Ready Player One, a screen was placed alongside the camera rig so the director could see a rendered, realtime version of the CG scene with the actor in the shot. We're excited about that. ■



Neill Blomkamp's Adam short-film series is rendered in realtime by Unity. He's attracted to working this way because he can instantly see the results, thereby avoiding reshoots





ABOVE **Forthcoming, Unity-built co-op shooter *GTFO*.** RIGHT ***Ori And The Will Of The Wisps* proves the engine's technical power.** BELOW **Unity's Book Of The Dead demo showcases platform-specific rendering optimisation tools and photogrammetry**



HELP DIALOGUE

Unity wasn't designed to be simple, but it can still get easier to learn



Taught in universities and even schools, Unity is still many new developers' first experience of 3D game development, but getting started is still a daunting prospect. Downie says that there are plans to provide more support to first-time users with tutorials, and clearer access to support services such as Unity Connect, where other Unity users offer help. "If you come into Unity on day one and are introduced to other people and have the tools to reach out to people in the community, that's going to empower you as a creator. You want people to come from having a notion through to some success; getting something on screen that they feel good about, as quickly as possible."

The real thing

At CES, Vive Pro and some future-gazing startups kick off the next generation of VR

Later this issue, in An Audience With…, Square Enix president Yosuke Matsuda sounds a familiar refrain from big-publisher bigwigs. Asked about his and his company's current stance towards VR, he joins the likes of Nintendo, Microsoft and EA in saying that, while virtual reality is an area in which his firm has a keen interest, the tech just isn't there yet. It's too expensive, requiring, at the top end at least, a premium-priced HMD and a beefy PC. Headsets are too bulky to be comfortable, and too inconvenient, trailing wires everywhere. Xbox head Phil Spencer said, at last year's E3, that the industry was "a few years away" from cutting the VR cord. Yet January's Consumer Electronics Show suggested Spencer's prediction may in fact have been a few years out of whack. The future is now.

CES has always been a bit bonkers, and not just for the way it summons a tech industry still getting over the turkey sweats to Las Vegas, of all places, in the first week of January. Every year it yields another crazy crop of because-we-can innovations – robot dogs, ovens that run on Android and, this year, a fingernail-mounted sensor with a sleek, nail-art finish that lets sun-worshippers moderate their UV intake. Yet it is the perfect setting in which to unveil new innovations in virtual reality; while the technology may be grounded in videogames, it's long been expected that it will extend far further than the field of play. This year's event showed how the second generation of high-end VR hardware is shaping up.

And it is doing so, in part, by looking to the low end. Sure, HTC's newly announced Vive Pro ticks all the right boxes, its dual-OLED, 2880x1600, 615ppi display representing an immediately noticeable 78 per cent jump in fidelity over the launch model. Yet the overhauled design of the now-navy-blue headset suggests that HTC's R&D bods have looked at the competition, and liked what they saw. It now sports in-built headphones, for instance, something the Rift managed elegantly at launch. And the weight of the hardware has been shifted from the original model's front-heavy design towards the back, an idea Sony's experienced industrial-design teams identified as optimal for PlayStation VR. A PSVR-style tightening dial on the rear headstrap completes the picture of a headset that, for all its obvious leaps forward, also borrows liberally from the recent past. They may be rivals, but they're all working towards the same goal: discovering the optimal hardware for a fascinating new technology.



OCULUS GONE
Oculus sits out CES in favour of its own annual showcase, Connect, but its absence from the tech industry's principal measuring contest should not be mistaken as a sign that it's resting on its laurels. It announced Oculus Go, a wireless headset with onboard processing hardware, in October, and while its $199 pricetag suggests it is unlikely to trouble Vive Pro in terms of raw grunt, it reflects how important wireless VR is to the industry. Further off is its true next-gen headset, Santa Cruz, which offers high-power, wireless VR with onboard tracking.

Elsewhere, Vive Pro contains some new features ostensibly aimed at attracting developers to the platform – dual microphones and front-facing cameras, plus support for up to four tracking stations (which have also been redesigned). And there's an intriguing







pitch to consumers too, with an overhaul to the Viveport store; while HTC's Valve hook-up means most Vive owners buy their games through Steam, the hardware maker's own software storefront will now offer roomscale previews of apps and games so you can try before you buy. No doubt most will use that as a testing ground for things they'll then simply go off and add to their Steam wishlists, but you have to appreciate the effort.

What, then, of the wires? While plenty of thirdparty companies have devised workarounds for the biggest immersion killer in roomscale VR, Valve and HTC have watched on from the sidelines – until now. Okay, the logically named Vive Wireless Adapter clamps to the headset's rear, and adds further weight to your set-up. But the effect it has on fast-paced games in which you move around a lot is transformative nonetheless. Nothing yanks you out of a roomscale world quite like tripping over a real-world cable python cutting off the circulation in your calves because you've turned around too much.

Maestro uses finger restriction, vibration and mechanical tracking to put your entire hand into a VR world

Vive's updates are nothing out of the ordinary; the second generation was always going to be lighter, more powerful and more convenient. In VR, it's the thirdparty startups that are pushing at the boundaries, and CES 2018 yielded glimpses of Vive support for the astonishing eye tracking from Swedish firm Tobii, and a remarkably low-profile, but high-powered reference headset, codenamed Elf, from Massachussets-based Kopin. With 2k resolution *per eye* beating even Vive Pro in terms of fidelity, this lightweight display technology could provide real competition to the established players – or at least provoke a buyout from them, which for many start-ups is the real point of a show like CES.

The most likely acquisition target of the show, however, was Contact CI, whose Maestro controller, if you can call it that, offered a mouth-watering glimpse of VR's future that goes far beyond biennial resolution bumps. Perhaps best described as a 2018 version of the NES Power Glove, Maestro uses finger restriction, vibration and mechanical tracking to put your entire hand, fingers and all, into a VR world. Touch a virtual object and it'll respond properly; not only can you pick things up, but you can bend and reshape them, with haptic feedback at your fingertips to deepen the sensation. It's absurd, ridiculous, transcendentally brilliant stuff – the sort of thing, along with mad robots and needlessly overpowered kitchen goods, at which CES excels. ■

Clockwise from top left: Vive Pro's new onboard headphones, redesigned headset and official Wireless Adapter usher in a new era of top-end VR



Maestro is already being used in such diverse fields as training, robotics and, of course, games

CHERRY BOMB

How puzzle adventure Chuchel uses minimal design and maximal personality to explosively funny effect

Poor Chuchel. The eponymous hero of Amanita Design's latest point-and-click adventure can't catch a break: the furious little dust ball suffers injury after indignity in pursuit of his beloved cherry. "It's fun to watch him do – and fail – pretty much anything," says **Jaromir Plachy**, designer, animator and artist on *Chuchel*. Whether he's attempting to communicate via abstract jabberings, playing the reluctant ship in a *Space Invaders* minigame, or being mercilessly teased by a giant blancmange, Plachy's creation is frequently hilarious.

Unlike previous Amanita titles such as *Samorost* and *Machinarium*, *Chuchel*'s look and feel is entirely in service of its comedic personality. "We decided on a very minimalistic art style," Plachy says. "It keeps you focused on the things we find important – beautiful backgrounds would be a distraction. When you're playing with your dog, you don't care whether you're at home, in a park or in a tin-can factory: you just focus on the actual play."

Offbeat percussive flourishes and expressive animations are key, Plachy says. "I wanted to design something the player could have a relationship with: a virtual buddy, a pet, or an annoying squirrel who just won't leave you alone." We're looking forward to *Chuchel*'s cherry-fuelled rampage across PC, Mac, iOS and Android this year. Plachy, too, is keen to see if his joke lands: "I believe the best way to make people laugh is to 'tickle' them with animations, and challenges."





Chuchel's pet dog, Anca, plays the straight man to the behatted hairball's hyperactive antics. Plachy describes Chuchel himself as "a mixture of my personality and my dog's personality"

Soundbytes

Game commentary in snack-sized mouthfuls



"I wondered if people would think that **Nier copied *Undertale*** but… since *Nier* is a game that I made by taking from many games, I don't really care."

Nier: Automata creator **Yoko Taro** on the gentle plagiarism behind 2017's most bonkers game



"Obviously when people think of PlatinumGames, they expect **crazy hardcore action** right? We want to surprise them, [but not] by, say, doing a princess-clothing-making game."

Fair enough, **Atsushi Inaba**, but if we're being honest, we'd totally play that



"I'd like *PUBG* to become a **universal media franchise** based on the game. We want to take part in diverse industries including esports, movies, drama, cartoons, animation, and more."

A battle royale *film*, PUBG Corp CEO **Chang Han Kim**? Sorry, we can't see it working

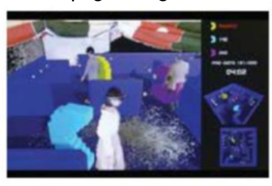
"It's like asking somebody if they want to **go back to jail**. Hell no. I absolutely wouldn't."



Bethesda founder **Christopher Weaver**, who left the company in 2002, seemingly has no desire to go back to the *Elder Scrolls* grindstone

ARCADE WATCH

Keeping an eye on the coin-op gaming scene



Game Pac In Town
Manufacturer Bandai Namco

With its VR Zone business proving a surprising success – expanding from the two-storey Shinjuku facility featured in E313 to London, Dubai and New York – Bandai Namco has a greater incentive than most to ensure there's a steady flow of new virtual-reality attractions to keep paying punters coming back. Yet for its latest creation, the company has cast aside the bulk and thick cabling of HTC Vive, which powers the majority of experiences on offer at the Shinjuku VR Zone. Instead, it's Microsoft's mixed-reality HoloLens goggles that are the weapon of choice here for what is one of Namco's silliest – yet also, weirdly, probably the most marketable – forays into the altered-reality space to date.

It is, simply put, *Pac-Man* in augmented reality. Up to three players can simultaneously don Hololens glasses, which will overlay into the real world an appropriately scaled maze that's dotted with pellets you need to collect. Ghosts appear and will chase down players – presumably, multiplayer is a necessary conceit so comrades can alert their pals to threats behind them – and can be dispatched by eating a power pill. It's daft stuff, yes, and requires a certain willingness to play along, since there's obviously nothing stopping you from walking straight through an AR wall, cutting corners to hasten clear times or give a chasing ghost the slip. But it seems like an absolute banker regardless, and has led Namco to dismantle a couple of existing attractions at its Namjatown indoor theme park in Tokyo's Ikebukuro district to make room for it. A wider release, both within Japan and, for once, abroad, seems inevitable.

My Favourite Game
Thundercat

The US musician on game music, embracing technology and the permanence of Mortal Kombat

Stephen Bruner is an American multi-genre bass guitarist, producer and singer working under the alias Thundercat. An acclaimed collaborator and session musician, he has released three solo albums to date, most notably 2017's acclaimed Drunk. Spanning 23 songs in just under an hour, it covers a whole range of themes, one of which is an obvious love of videogames.

Do you remember when you first got excited about videogames?
It had to be between Nintendo and Sega Genesis, but I feel like the actual moment for me was *Sonic The Hedgehog*, because it was so fast and so fluid, and the music… yeah, *Sonic The Hedgehog* was definitely, like, the kick-off of videogames.

So game music was an early influence for you?
I grew up in a musical family, but games have definitely influenced my musical creativity. Everything would always be sonically processed a lot of the time for me: I would hear things and it was like they'd go through a different set of ears, I guess. But specifically with the composer Masato Nakamura, who was behind the soundtrack for *Sonic The Hedgehog* – as soon as you heard the title song, it was just a bit better and crazier. It had that Prince vibe to it. It sounds like the B section of Let's Go Crazy!

Clearly, music from the 16bit era made its mark on you. Do you feel the same way with modern game music?
I feel like a lot of it is a bit of a cop-out. It sounds like somebody just started up Ableton and let the demo play and then decided that would be a recording for a videogame. But there are definitely games where you can still notice the music is outstanding. For instance, the composition in *Breath Of The Wild* – I'm playing it again, I just started over – hearing the different sounds on piano, the moods, the textures that are created with the music in the game, it's just so beautiful. It reminds me of what it was like when I was a kid, of the time when I first heard *Sonic The Hedgehog*.

GOOD COMPANY
Bruner hails from a family of musicians, having been part of the boyband No Curfew at the age of 15 and also a member of punk band Suicidal Tendencies with his brother, Ronald Jr. He has received notable acclaim for his work as a session musician for artists such as Erykah Badu and Flying Lotus, eventually joining the latter's Brainfeeder record label to release his solo albums. He has collaborated with other artists including Childish Gambino, Kamasi Washington and Kendrick Lamar. Find out more about his music and tour dates at bit.ly/thcat.



Does your reverence for classic game music apply to hardware and software? Are you a collector?
No, I'm with the new times. I'm happy about the idea of being able to download [new games], though I'm not so happy about in-game purchasing (laughs). I feel like I've made it a point in my whole entire life, it's kind of like eating for me: whatever's new, you have to try it. I actually got turned on to PC gaming by Flying Lotus, and it changed my life. I didn't know how PC would fit into this world where I'm already shelling out all this money to play all these different consoles, but the minute I purchased an MSI Titan, it was life-changing. I was like, 'Oh, I can do all of it on this one laptop.'

> "I actually got turned on to PC gaming by Flying Lotus, and it changed my life"

What's your gaming set-up when you're on tour?
Depending on how long I'm going out, I'll take my PS4 and my PC, and I'll take the Nintendo Switch with me. I'll just connect it wherever I'm at, connect to the Wi-Fi and have it set up for people to play. If there's a new game out, I'll download it and spend some time with it while I'm out on tour.

Your song Friend Zone makes references to *Mortal Kombat* and *Diablo*. What's their significance to you?
Well, if you've had a chance to play *Diablo*, then you know the story! I feel like *Mortal Kombat* is a consistent thing in life, from the time it began. Those games are just epics. *Mortal Kombat X* and *XL*, they're just, like, on another level. I feel like it's one of the more outstanding things because of how long it's been going. It's always funny because whenever someone sits down and plays with me or Flying Lotus, they get their feelings hurt because they're like, 'What the heck, why are you so good?' And I say, 'I've been playing *Mortal Kombat* for 20 years, man!' (laughs)

Sounds like *Mortal Kombat*'s your number one, then.
My favourite game of all time, that I really feel like hasn't gotten justice on any new system, is a PS1 game called *Tenchu: Stealth Assassins* – I think it was *Tenchu 2*, to be specific. That, for the ages, is still one of the coldest games ever. It had a bit of that *Metal Gear Solid* feel, a bit of that *Syphon Filter* feel, a kind of a pre-*Splinter Cell* feel, and it was just about being a crazy ninja. It was insane. ■



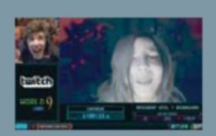
As a *Dragon Ball Z* fan, one of Bruner's most anticipated games isn't too surprising. "I'm ready for *FighterZ*, man," he says. "I'm saving up all my energy for it"



WEBSITE

Keiichi Tanaka's Den-fami Nico webcomics
bit.ly/tanakacomics

Videogame and manga artist Keiichi Tanaka has an ingenious method of presenting his stories about, and interviews with, game designers: comic strips. From one on "the invaluable soul of *Zoids*", another on *Yakuza*'s unlikely inception, and the moving series on *Mother*, each tale is richly illuminated via Tanaka's pencils. Developers' childhood anecdotes are charmingly realised: so too are Tanaka's own reactions and interjections, lending conversations depth and realism. Visual representations of analogies entertain most – a depiction of *Mother* creator Shigesato Itoi as a salted snail is not to be missed – but Tanaka's comics go beyond mere diversion, providing a uniquely intimate glimpse into games creators. Now, if only we could get him in **Edge**.



VIDEO

Resident Evil 7 Speedrun
bit.ly/resi7run

This was the standout speedrun of AGDQ 2018, and makes for the perfect recommendation to those who are yet to have been bitten by the game-breaking bug. Runner Carcinogen (and his supportive couch) are informative and entertaining, dishing out facts about *Resident Evil 7*'s secret skips, menu optimisations and even its Louisiana setting while mugging for the camera. But the unpredictable horror game itself is the real star: some suitably malevolent RNG and monster spawns ensure our host is kept on very real, very funny tenterhooks at every turn.

WEB GAME

Surviv.io
bit.ly/2Dpubg

And so it begins – continues, really, given how the likes of *Fortnite* and *Paladins* are merrily riding the *Battleground* hype train to Profit City. *Surviv.io*, however, won't cost you a penny, and its take on battle royale shooting is marginally more original, offering a top-down 2D perspective. Loot, explosive barrels, multiplayer duelling and an enclosing circle of death: it's all here, albeit simplified, guns little more than sticks and protective helmets coloured discs. The 2D solution to scopes seems ingenious at first, as you scroll the mouse wheel to zoom your view in and out, but becomes irritating after a few instances of being shot by someone off-screen who's bagged a 4x. But rounds are fast, camping is rare, and with a 'squads' update on the way, this is a surefire chicken dinner.



THIS MONTH ON EDGE

When we weren't doing everything else, we were thinking about stuff like this

DOCK

Razer Project Linda
bit.ly/projectlinda

Razer loves a concept piece (remember the gaming laptop with three fold-out monitors?) but this year's CES offering may be worth serious investment. Project Linda is a laptop-shaped dock for the Razer Phone (see **E**314): place the handset in the gap where you'd usually find a trackpad, press a key, and a USB-C connector locks it in place, powering the laptop and charging the phone. Project Linda's 120Hz, 13.3-inch Quad HD touchscreen display runs games beautifully, while the phone displays menus and minimaps. A Razer Phone is required but with some smart pricing, the convenience of another hybrid device might sway a few Switch believers.



continue

Heavyweight title
Sumo Digital makes a strong statement of intent by acquiring CCP Games Newcastle

Mushroom crowd
A last-minute $4,000 donation sees Toad face down Meowser at AGDQ

Police dog
Sting will voice Dire Wolf in storytelling title *Where The Water Tastes Like Wine*

Twisted firestarter
After an incendiary Twitter tease, Nintendo announces *Dark Souls* on Switch…

quit

League of gentlemen
Overwatch is all about diversity – except for in its esports player rosters, it seems

Had your chips
Meltdown and Spectre security flaws compromise Intel tech. Great

Adaptor die
With its Xbox convertor discontinued, Kinect is now officially defunct

Prepare to cry
…but the full trilogy remaster appears to be both Japan- and PS4-exclusive

TWEETS

Shout out to all my fellow AAA devs who are slightly jealous of their indie friends that can show and talk about the cool stuff they're making any time they like.
Steve Thornton @_SteveThornton
Lead designer, Sperasoft

God damn it #AGDQ2018, I have deadlines this week.
Tommy Refenes @TommyRefenes
Creator, *Super Meat Boy Forever*

Whose leg do I have to hump to get a *Katamari* game for the current generation of consoles?
Wil Wheaton @wilw
Actor and writer

Imagine being unwilling to donate to a charity event because they revoked your permission to scream slurs into a meaningless circlejerk of angry gamers.
Alexis Ross @princessproto
Speedrunner and announcer



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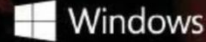
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DISPATCHES MARCH



Issue 315

Dialogue

Send your views, using 'Dialogue' as the subject line, to edge@futurenet.com. Our letter of the month wins a year's subscription to PlayStation Plus, courtesy of Sony Interactive Entertainment



PlayStation.Plus

Immersion heater

Breath Of The Wild and *Super Mario Odyssey* deserve their pride of place in your 2017 awards (**E**315). I write to offer, not a top ten rant or rave, but a perspective on Nintendo's achievement.

Much of my game time last year was spent catching up with the finest, most intricate immersive sims on PC: I played and re-played *Dishonored 1* and *2* and *Deus Ex: Mankind Divided*. These games offered me deep and lasting pleasures. Nothing I've experienced surpasses the brilliant, subtly deceptive level building of the Clockwork Mansion in *Dishonored 2*. And, more generally, both IPs are impeccably realised in gritty, morally fallen universes full of rats and bloodflies or backstreet cyberpunk dreadfulness.

Step out onto the plateau in *Zelda*, on the other hand, and you are in the realm of the sublime. No grit here. And no faults. Good heavens, this is flawless work. The 80 hours I gave to my first playthrough weren't enough: I've just restarted, this time intending to tackle the game's regions quite differently and in the opposite order. YouTube has hinted at what I missed first time round.

Mario is, I admit, less to my taste. I don't deny for a moment that it's a model of perfection, delicately balanced so that even inept platformers like me can complete it. But I just know I won't be replaying for completionism's sake. Of the two, it was *Zelda*'s fantasy, not *Mario*'s playground, that tweaked my sense of wonder.

Both Nintendo games are undoubtedly high points in the history of the medium. But, this *Dishonored* player asks, aren't they just a little bit too... colourful? For all their polish and promise, aren't they both emotionally shallow? There is human interest of a kind in Link's relationship with the princess, of course; and, in the most rudimentary sense, there is an emotional hook in Mario's quest to liberate his maiden. Neither of these, however, approaches the adult sophistication of Adam Jensen's noirish cynicism or Delilah Copperspoon's damaged, very grown-up lunacy.

It was a triumphant year for Nintendo. My abiding niggle is that what they are offering on Switch is, compared with other IPs on established platforms, a range of captivating, immaculate toys.
Neil Rutter

That this should niggle, rather than enrapture, is surely just a matter of taste. With so much grit and grime elsewhere, surely a little sun peeking in through the curtains is something worth celebrating?

"As our joint relationship with games progressed, so did our lives in the real world"

Peace, love, unity

The year 2017, as it was stated in **E**315, has not been one that has given me much to be cheery about when I have not had a controller in my hand. In April, my father-in-law passed away, and a month earlier – almost to the day – one of my oldest and dearest friends passed away, long before it was his time. Andy was a friend since I responded to his advert in Zzap! 64 looking for contacts to swap software with (which at the time involved exchanging 5.25 inch floppy disks in parcels, with Pritt stick over the stamps to save on the cost). I visited him at his parents' place when we were both at school: my parents drove me there.

Our friendship was off to a flying start. We played games and enjoyed demos on the Commodore 64, moving on to Amiga, PCs and consoles. As our joint relationship with games progressed, so did our lives in the real world. He never married, but I did (twice). He was there as my best man for the first.

I remember that day less clearly than the day we went to the software shop in Cheltenham to buy *GoldenEye* on N64 and





played the hell out of it. We would write to game programmers: I still cherish my handwritten note from Andrew Braybrook, and he had his newsletters from Jeff Minter when his mailing address was in Reading and he was working on the beloved platforms of the Commodore VIC-20 and C64.

One of the many things Andy and I had in common was our enjoyment of this magazine. We bought it every month without fail. I had moved several times and some of my issues were sadly left behind. There were still dozens of boxes with copies in, but there were gaps. A couple of months after he passed, his belongings were being sorted and his sister called me about these boxes of magazines he had. She knew we had this, amongst many things, in common so she asked if I wanted to collect them, which I did.

Now, after some sorting and a couple of missing issues purchased from Ebay, my collection is complete. In his honour, and in honour of his feeding my love of videogames, the set is there. A glorious history of this wonderful world of videogames. Rest in peace, Andy, and long live videogames.
Rob Brammeld

Thanks immensely for this, Rob. It has suddenly got very dusty in the **Edge** office.

Startup sounds

My name is Bruce, and I am a senior highschool student and a new reader of **Edge**. Because I am new to this magazine, I thought it would be a good idea to catch up on recently released issues, so I picked up a copy of **E**314, which happens to feature an article celebrating the 30th anniversary of *Final Fantasy*, the world-famous RPG series that has had a special place in my heart for many years.

I found the whole article incredibly endearing because a few of my friends and I have made plans to form a videogame studio (which we have called LilBlueNest) and are in the early stage of developing an RPG of our own. To hear how industry legends talk about their hardships and struggles to create something they're passionate about is motivating for a young team like mine. Whether this dream project my friends and I are working on will lead to something fruitful or not rests completely on how much energy we put in, but reading this article has given us a bit more strength and courage to pursue this project.

The game industry has gone through many changes in the past three decades, but the same love of games is there, if not stronger than ever. I might be sounding like an extreme greenhorn right now, but I'd like to believe that so did Sakaguchi when working on the original *Final Fantasy*. After all, amazing things can come from a series with 15 entries, or an indie studio making its first step. From legends to novices, we all just want to make games.
Bruce Koussaba

Sakaguchi's story inspired us, too – and also made us feel a little better about the ramshackle conditions under which this fine tome is somehow made every four weeks. Enjoy your PS Plus subscription.

A year in review, in review

I just finished reading through the Annual and wanted to quickly say bravo to everyone at **Edge** – the quality of the writing, depth of research and variety of content in these pages is a testament to the great work you've all done over the last 12 months. I particularly loved the 'Eastern Promise' feature, which was a fascinating look at a huge gaming market I'd never been exposed to at all, as well as the Time Extend feature on *Catherine* and the collected works of Fumito Ueda.

Since you asked, I wanted to also share a couple of thoughts about The Annual. While I think the idea to highlight the best writing of the past 12 months – as opposed to just supplying a cavalcade of lists – is a great one, I think an exception should be made for reviews of the best games of the year. Simply reprinting the original reviews doesn't provide the retrospective appraisal that I really love from Game Of The Year roundups, which should be an opportunity to look back and talk about a game's significance with the whole year in view.

I also think that simply reprinting reviews doesn't make it clear if they were supposed to be ordered or not – presumably, *Zelda* was GOTY, but were *Splatoon 2* and *Yakuza 0*, (both awarded 8/10) higher than *Nioh* because they were printed first? Maybe that sounds pedantic, but I just think a bit more clarity could have helped, or an introductory editorial piece to talk about changing opinions. Also, I presume the only reason *Odyssey* didn't feature was because of deadline cutoffs, but in that case, putting Cappy on the front cover was a bit confusing.

I personally would still like to see fresh pieces on the best games of the year, though I understand there were probably time constraints since the Annual released around the same time as the last regular **Edge** issue with that incredible *Final Fantasy* feature (again, good shit everyone). Regardless, **Edge** continues to be not just the best gaming magazine around, but in my opinion, one of the best monthly publications full stop.
Stuart Wood

Thanks for this, Stuart (and everyone else who sent similar feedback on The Annual).

Trigger unhappy

Just wanted to express my distaste for having read the sentence "that the customer cannot possibly be allowed to have any control over her own media product in her own house" in Mr Poole's piece from **E**314. Can you please call him and tell him to stop being such a wimp? Oh sorry, did I offend you? I like my print correct. Not politically, though.
John Nakhoul

We've tried to talk to Steven, but he speaks a language so advanced that we simply can't communicate. We put the above to him, and only discerned a single word: "Triggered". ■



STEVEN POOLE

Trigger Happy

Shoot first, ask questions later

Observing moral progress in action is a fine thing indeed. Videogames used to be blamed for school shootings in America, with excitable news reports claiming that the perpetrator was an obsessive player of *Doom*; and Gus Van Sant's 2003 film Elephant, based on the 1999 Columbine massacre, was filmed from a brutally elegant firstperson viewpoint. But now videogames are on the side of justice, at least if we take as representative the example of the latest official product of the state-sponsored military-entertainment complex.

The US Army Research Laboratory, which works on such cool stuff as environmentally friendly red flares, 3D-printed drones, and super-lightweight ceramic armour, has produced a videogame intended to train teachers to respond to school shootings. In its VR simulation, running on a system called the Enhanced Dynamic Geo-Social Environment, you can take the role of a teacher corralling terrified students into classrooms, or lining them up against walls, finding large items such as tables that can be used for barricades, and locking doors so that the shooter can't get in. Suspensefully, in the corner of the screen is a shooter-cam that shows the murderer's progress from his own point of view. As Tamara Griffith, one of the system's engineers, told the Associated Press: "With teachers, they did not self-select into a role where they expect to have bullets flying near them. Unfortunately, it's becoming a reality. And so we want to give them that chance to understand what options are available to them." If being the teacher sounds boring, though, you can also play the game as an armed law-enforcement officer trying to stop the shooter, or as the shooter himself, trying to murder as many children as possible. Something for everyone!

This is obviously a serious project run by people who want to help. The system is based on close analysis of real-life events such as the Columbine and Sandy Hook shootings, with unnervingly accurate audio of screaming and wailing, and helping teachers not to freeze or panic when such things happen could indeed save lives. It also allows for some experiments with school infrastructure. Project manager Bob Walker explained: "They can do some analysis in the engine and say, 'What would happen if I did have externally locking doors? Or what would happen if I add intercoms, how would that change the survivability of this situation?'"



Illustration kaeru.com.ar

When you have a hammer, everything looks like a nail, and when you have a gun, everything looks like a target

Even so, the very existence of such a game is culturally alarming, particularly given the heavily circumscribed nature of its 'geo-social' simulation. Oddly not simulated in the game, for example, is the passing of stricter gun-control laws that would make a school-based gun rampage far less likely in the first place. And the potential for this to become the basis of a perversely popular series is clear. Why stop at schools? You could have anti-shooter shooter games set in rock-concert venues, or cafés, or outside high-rise Las Vegas hotels. And it is presumably only uncharacteristic delicacy that prevents the existing game from allowing the teachers themselves to be armed, as Republican NRA stooges repeatedly suggest with a straight face. (It would hardly be surprising to learn that this option does in fact exist, in a mode not so far demonstrated to reporters.)

Further in the future, the logical evolution of such a game would be to expand its remit to situations that currently involve no guns at all. When you have a hammer, everything looks like a nail, and when you have a gun, everything looks like a target. The real tragedy of a country such as the US, which contains more guns than human beings, and in which armed toddlers kill more people annually than Islamists, is that there are so few opportunities for gun-owners to fire off rounds in a sanctioned way. This state of affairs, evidently, requires urgent reform, to be accomplished by technologically enabled social engineering.

Therefore, under the stable genius of President Trump, we should all look forward to the development of shooter games focused on how to persuade a recalcitrant Congress to pass massive tax cuts, or shooter games that train the proud citizen to make America great again by preemptively neutralising people who, on the basis of their skin colour, look as if they might hail from one of the countries listed on the travel ban. As videogames themselves have taught their fans over the years, after all, there is no situation that cannot be improved by adding guns to it.

Steven Poole's Trigger Happy 2.0 is now available from Amazon. Visit him online at www.stevenpoole.net



NATHAN BROWN

Big Picture Mode

Industry issues given the widescreen treatment

One of the most frequently levelled accusations against game journalists (feel free to add your own sarcastic airquotes) is that we don't do enough proper, long-form investigative work. I suppose that's fair enough, but something I often think is overlooked is that, if you want the way games are covered to change, you, the reader or viewer, have to change in kind. In doing so you can make not only the game press better; you can make the Internet better too, and we could do with some of that right now. What follows is a set of recommended New Year's Resolutions for how we all might better approach the gaming Internet. Unsurprisingly, they work equally as effectively for the Internet as a whole.

For a start – and this really should be obvious by now – do not click on articles with which you can tell you vehemently disagree from a quick look at the headline. If you suspect something has been written specifically to elicit a negative reaction from you, avoid it like the plague. Ideally you'll then resolve to avoid the entire website on which it was published, as that's really the only way they'll get the message, but I'll leave that decision to you.

Next, I suggest that you, as the reader, follow a simple rule abided to by just about every right-thinking writer on the planet. Do not read the comments. There is rarely anything but bile and bad vibes that will make you feel worse about life, the universe and everything within minutes. There are exceptions, certainly – I'm continually impressed by the quality of discussion below the line at Rock Paper Shotgun, for instance – and I'll assume you're intelligent enough to make your own decisions based on your own experiences. But ask yourself this: how many times have you read an online article's comment thread and come away feeling like it was a worthwhile use of your time, and from which you've really learned something of value? And how many times have you come away sad, or angry?



Illustration **kaeru.com.ar**

Above all, please stop sharing things you hate, or think are bad. Why on Earth do people do that, anyway?

Which brings us elegantly to Twitter. Follow people you like. Stay away from those you don't. I see a lot of hand-wringing about the need to break out of our bubbles, to open up to the world beyond our echo chambers, because it's our close-minded insularity that led to Brexit and Trump and, I dunno, *Battlefront II* or something. Well, fuck that. Is following an alt-right YouTuber, or a whatabouting dullard, or Donald Trump (the only person on the planet whose New Year's Resolution was 'spend more time on Twitter') going to make the Internet a better place, or my life any better? Clearly not. Twitter was born as a way of staying cheerily close to the people you like and respect, not as a method of keeping tabs on a hate mob. Don't rise to it; don't get into fights, don't hate-follow or bait-quote or subtweet. It's not worth it. Debate is long since dead. These days, all anyone does is shout.

I'd like to see a little more care, too, in how we use YouTube. The clickbait rule applies even more strongly here, since the written press' cynical gaming of Google's search algorithms has absolutely nothing on the way video makers have exploited them. I have a personal rule about exclams in video titles that serves me well. There's plenty of great stuff on YouTube, but much of it gets buried by shouty reaction videos, list features and clickbait. If you're not sure about something, log out before you watch it, lest your recommendations be forever filled by *FIFA* pack openings and Anita Sarkeesian hate videos. And maybe footage of dead bodies, since that's apparently a thing now.

Above all, please stop sharing things you hate, or think are bad. Why on Earth do people do that, anyway?

My main New Year's Resolution for using the Internet, however, is simply to use it less. My connection went down for a few days late last year, and life as good as ground to a halt (not least for the kid, for whom scheduled television is a horrifying, abstract concept). Sure, I couldn't live without the Internet; it's capable of so many wonderful things, but it's also home to so much of what's wrong with the world today, he said, shaking his stick at a cloud. I'm trying to use my phone less. As a family we're reducing our screen time. I'm not even playing much *Destiny* any more.

I'm not suggesting you do all of this yourself, of course. I'll leave it to the Internet to insist how you should feel about something. But there's one loud lesson here I hope we can all agree on: magazines are brilliant, aren't they? Do keep buying them.

Nathan Brown is **Edge***'s editor. If you liked this page, you can't like or comment – but you're welcome to subscribe*



ALEX HUTCHINSON

Hold To Reset

Building a new game, a new studio and a new life from the ground up

Mid-winter in Montreal gamedev is an interesting moment: it's -38° outside with wind chill, there's no Christmas to look forward to, and it gets dark at 4:30 in the afternoon. On one side, there's a great incentive to stay indoors and work when going outside can be physically painful. But it can also be the moment where everyone looks most critically at what they've been doing the previous year without the benefits of vitamin D.

For Typhoon, it's a pivotal moment. We submitted our first major demo to our publisher at the end of the year, and are now in the process of waiting to see if they will pick up the full game. If they do, then it's another minor ramp-up of staff and straight into preproduction. If they don't, then I will be taking that demo on a road trip across the globe to try and secure a new source of funding. This is very different to failing a gate at a big studio, where usually your game was cancelled, but you were still gainfully employed. Here, we keep our game if we want, but we have a ticking clock before we're all outside enjoying the cold.

Thankfully, both require the same process in the office: sitting down and thinking critically about not only the game we've built, but also how we've built it, and then trying to find ways to make both better. Historically, this sort of process is handled in a post mortem at the end of a large project, and generally it feels like little more than a placebo. Usually the team is so big that feedback is diffused, and a large percentage of people will be immediately reassigned to another project anyway so they won't even be around to enact or experience the change. Finally, the franchise has a kind of inexorable momentum, both in terms of content and process, so even the best intentions are fighting an uphill battle.

In our case, it's more of an existential question. We need everyone to be doing more than just the one job if we're going to pull this off, which requires a significant level of commitment and focus. If people don't feel like their voices are heard, then why would they stick around? It's not so much that everyone has to agree with every decision, but everyone at least needs to understand the reason for the decision so they can work effectively.

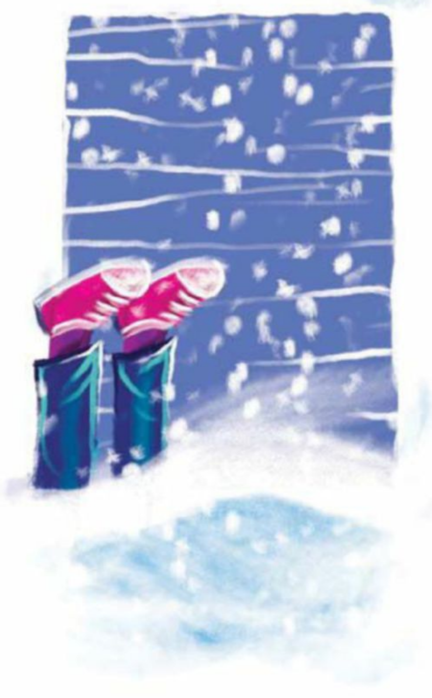


Illustration **kaeru.com.ar**

Doing more of something that's partially working is often a better strategy than trying to fix something

So this week has been spent trawling through 20 different documents filled with likes, don't-likes and ideas, to build up a bunch of key topics that we will need to have discussions about. Everything from tone to the core loop to art direction and world-building process are up for discussion. We had everyone submit their feedback in an email first, to try and avoid the groupthink that can occur in a discussion, and make sure that even those team members who may not be comfortable in a raucous roundtable setting had a chance to get their point across.

Next, I'm collating those emails into key topics that seem big and juicy enough to warrant a meeting. The aim is not to make the final call then, but to work through as many ideas as possible. Many of these meetings will be about difficult features that aren't gelling, but I also think that it's worth discussing the parts of the game that people think are already strong. Doing more of something that's partially working is often a better strategy than trying to fix something.

Hopefully, in the end we will have a list of cuts, a list of 'more please', and then a small and focused list of items we need to iterate on. Then I get to present the decisions back to the team in a big all-hands meeting.

I've often felt that past a certain point of development, consistency beats a perfect answer, and this has never been more true than it is for us now. On a big franchise game, we were able to place significant bets without risking the success of the entire project, but at Typhoon we need to make one, strong, clear bet and do as little of everything else as possible – which means a highly rigorous pruning process.

And that can be emotionally draining for everyone, as we define a series of rules that we can test the game against that may not be to everyone's personal tastes. Is it skill based, or more of an experience? Do we want the player to engage in combat all the time, or not? If we get it right, we can be consistent and cohesive. And hopefully, make a game worth talking about, so that it's an easy job for a future **Edge** staffer to write a two-sentence summary that still seems fresh and exciting in the preview section. Not that I'm making any assumptions, of course.

Alex Hutchinson is co-founder of Montreal-based Typhoon Studios. He can be found on Twitter at @BangBangClick

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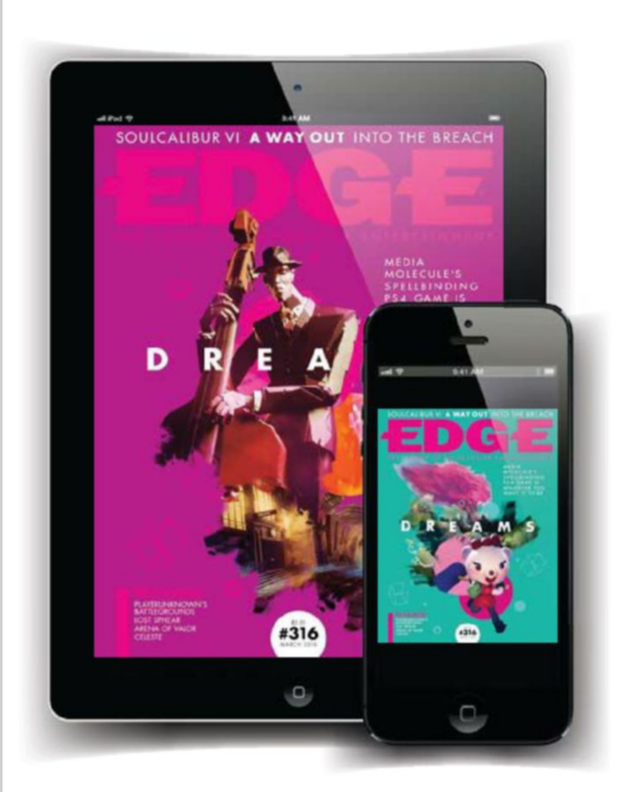
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#316

H Y P E

THE GAMES IN OUR SIGHTS THIS MONTH



Explore the iPad edition of **Edge** for extra Hype content

Play, unite, share

Josef Fares' *A Way Out* (p36) is certainly forward thinking, a game about two men on the lam after a prison break that tells its story from both men's perspective simultaneously, and is playable only in split-screen multiplayer. Yet its greatest innovation is its Friends Pass feature, which allows the purchaser to invite an online accomplice to play through the game with them without paying a penny.

It's a system that's been hinted at before – *Far Cry 4*, for instance, let you invite a freeloading partner for a set number of co-op sessions. It mirrors, too, the way many people buy and play games, exploiting system-software mechanisms designed for families; set your pal's console as your main system, and vice versa, and you can take turns buying games, effectively halving the price.

Yet as is so often the case, what feels like progress is actually a step back. Since the arrival of networked matchmaking, local multiplayer has been forced at least into the back seat, if not out of the vehicle entirely. The indie scene may have responded with a rush of delightful local-multiplayer games, such as *Towerfall* and *Nidhogg*. But local, split-screen co-op was consigned to the bin. How cheering to see Fares and team pull it back out.

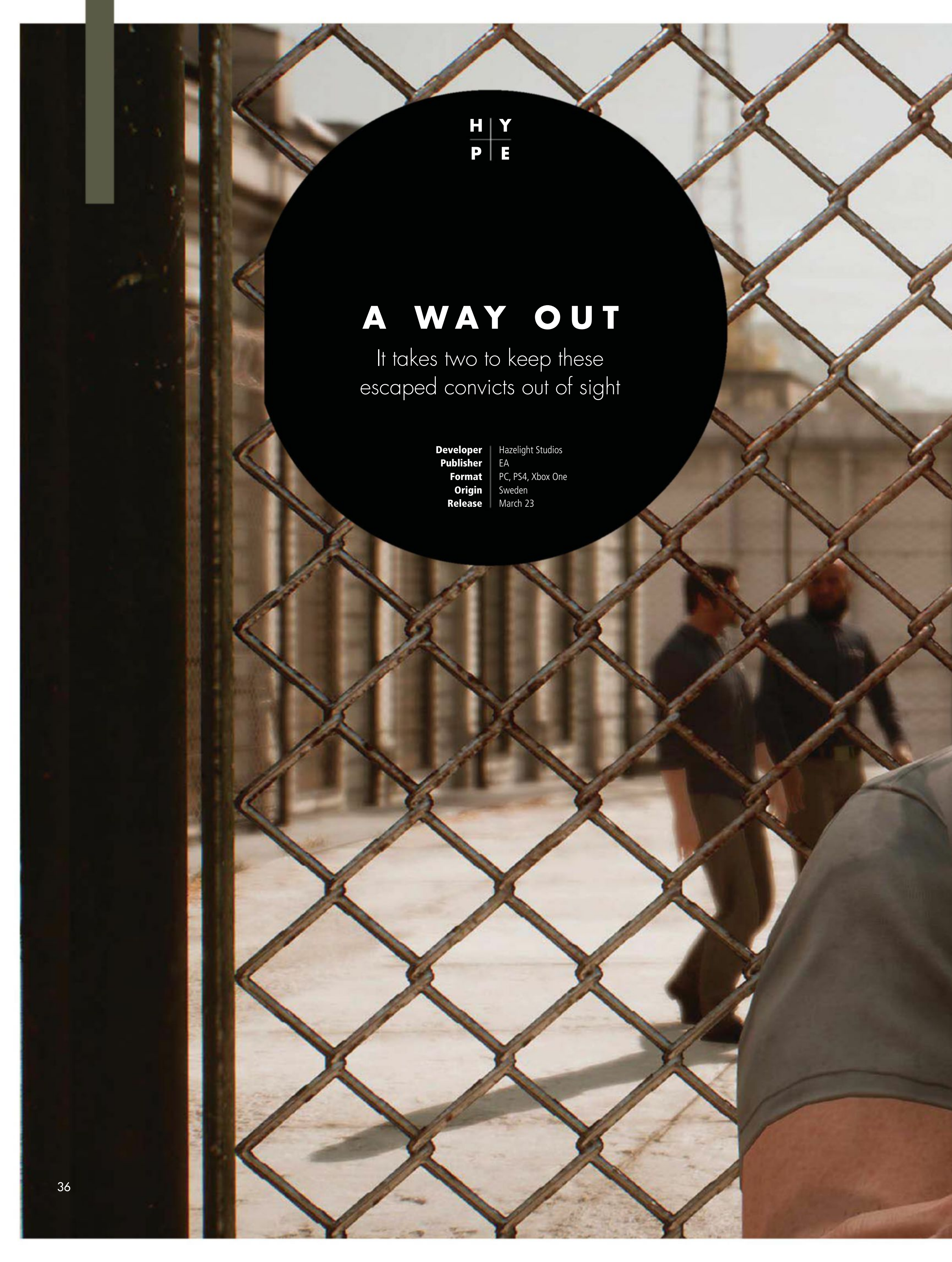
It's a good month for those who, more broadly, like to see old ideas return in new ways. *Into The Breach* (p44) sees the team behind *FTL: Faster Than Light* turn its attention from spaceship management to turn-based combat. *They Are Billions* (p54) sits squarely in the middle of the Venn diagram of *Sim City* and The Walking Dead, a cross-pollination of two timeworn ideas that nonetheless feels thrillingly new. For all the pace at which videogame technology improves, true innovation can be hard to come by. When smashing old ideas together yields such intriguing fruit, however, we're of no mind to complain.

MOST WANTED

Mario Tennis Aces Switch
The disappointing *Golf Story* may have made us lose our sporting-RPG appetite almost as soon as it was whetted, but we remain optimistic for the next game from Camelot. This story-driven tennis game will tide us over nicely while we wait for 2018's true big hitters on Switch.

Hokuto Ga Gotuku PS4
File this one under 'no brainer': a Fist Of The North Star tie-in developed by the team behind *Yakuza*. The latter series has long offered a fine line in brutal combat; this hook-up with the head-squishing action of Buronson and Tetsuo Hara's bonkers manga is a perfect match.

Fe PC, PS4, Switch, Xbox One
Zoink Games' ethereal puzzle-adventure will be with us this month, and its imminent arrival is nothing but good news for EA. It's a timely, and sorely needed, reminder that EA isn't all about loot boxes and grubby monetisation – not at this time of year, anyway.

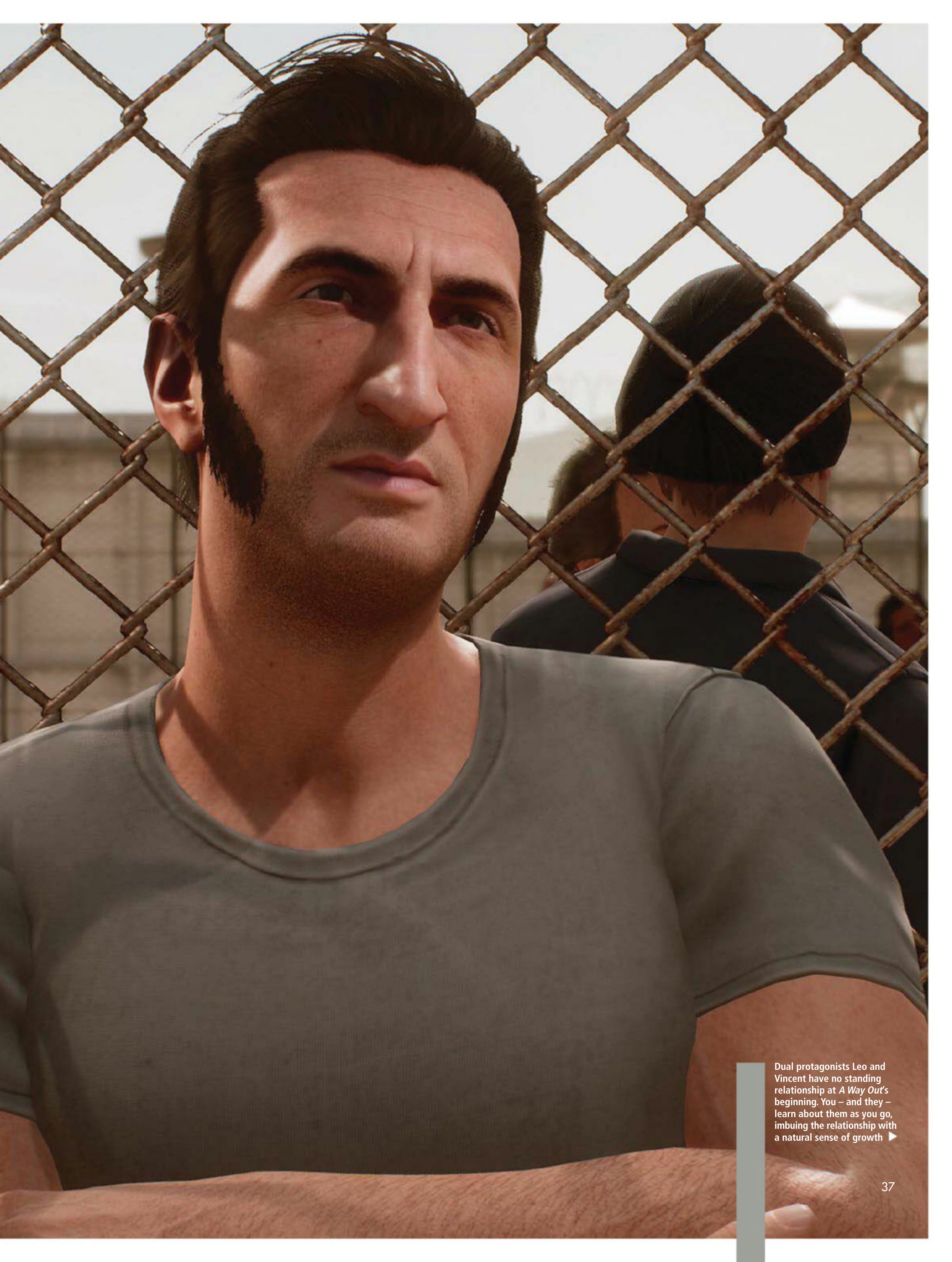


HYPE

A WAY OUT

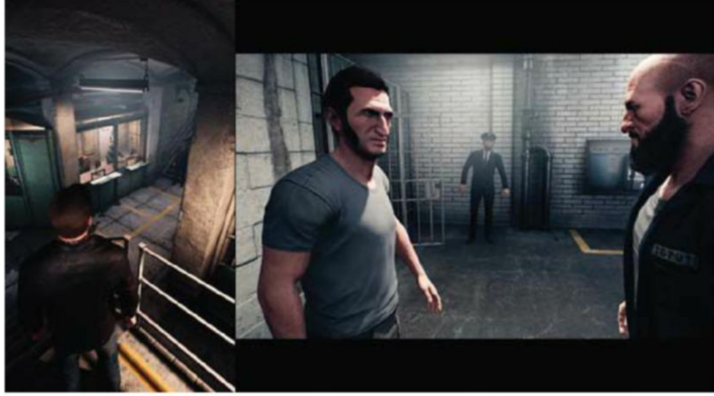
It takes two to keep these escaped convicts out of sight

Developer	Hazelight Studios
Publisher	EA
Format	PC, PS4, Xbox One
Origin	Sweden
Release	March 23



Dual protagonists Leo and Vincent have no standing relationship at *A Way Out*'s beginning. You – and they – learn about them as you go, imbuing the relationship with a natural sense of growth ▶









TOP **It is incredibly rare, even when playing online with a co-op partner, that you can't see what the other player is doing. It's a story about both characters, not just yours.**
ABOVE **Robbing a petrol station might be the behaviour of nefarious types on paper, but Leo and Vincent's criminality is portrayed throughout as a necessity. This doesn't exactly mean they're good guys, though**

TOP **Splitscreen isn't used all of the time; just as deemed necessary to keep both characters on-screen. It is, however, used for stylistic reasons at some points.**
ABOVE **The two characters' differences are highlighted in sections like this, with one sweeping with ease through rickety walkways – while the other hesitates, suffering intense vertigo and requiring a helping, steadying hand.**
RIGHT **Cutscenes don't stop the action, and while one character chats to progress the story, the other can simply make a nuisance of themselves in the background if they want**





A WAY OUT



Josef Fares, it seems, is the new face of story-led game development. The Lebanese-Swedish film-director-turned-game-maker would have risen to the top of anyone's list regardless, but his journey to notoriety was expedited by his appearance at The Game Awards in December, with an exasperated Geoff Keighley trying to rein in the outspoken studio head. While his 'fuck the Oscars' patter was funny enough, and his line about EA and loot boxes ("all publishers fuck up sometimes") had PRs loosening their collars in abject terror, one message rose above the din. With *A Way Out*, Fares might just be onto something special.

Telling the story of Leo and Vincent, convicted felons on the run after a prison break, *A Way Out* plays out as a story-led, co-op only adventure. Players will take control of one character or the other, either locally or online (either way in split-screen) and guide the escape artists on their way, making decisions as they go and getting to know one another as it progresses. And just to reiterate: it simply cannot be played alone, unless you're able to successfully manipulate two controllers at the same time.

After playing *A Way Out* with Fares, there's little doubt this is a concept with real potential – and the director's confidence backs that up no end. With a relatively small team (starting at ten, growing to around 30) and a budget to match, at least by EA's typical standards ($3.7 million from the publisher's Originals imprint), Fares' endless bravado can't disguise the fact that it's been hard to get this ambitious game up and running. "From the perspective of the small team we are, it's been challenging for us," Fares explains. "I made six feature films before *A Way Out* and *Brothers*, and they're nothing compared to making a game. It's way harder. It's way harder because of many things.

"When you make a movie, you pretty much have a solid idea of how the product should go; you can plan it better. In a game, you can't really plan that out, especially if you're doing something that hasn't really been done before." Fares and many of the returning Hazelight team worked on 2012's well-received *Brothers: A Tale Of Two Sons* before jumping almost straight into work on *A Way Out* – and as we quickly approach launch we're left with a game that feels, and looks, remarkably similar to what the team's original plans set out to achieve. "I'm making the game I want to play with my friends," Fares tells us. "I think playing a story together is an underestimated genre. It doesn't all *have* to be run-and-gun, you know?"

This distinction is one that's hammered home repeatedly during our time with Fares – while the initial reveal of *A Way Out* during E3 2017 prompted speculation about its production values and just how open-ended it would really be, concerns were unfounded. This is a linear story, where every scene goes from A to B: you will see variations in how you get to B, sure, but the outcome of the scene and the story will always be the same. Additionally, this is a game being made by a smaller team and will be released at a lower-than-full price. And, as Fares says, this really isn't a run-and-gun kind of thing.

> ***"I've done six feature films, and they're nothing compared to making a game"***

Speaking of money, Fares beams with pride as he tells us all about the Friends Pass: a system he and his team pushed for that allows a player to purchase and share one copy of *A Way Out* with an online pal to be played, in full, from start to finish. When something is mandatory co-op it does seem a mite unfair to expect everyone playing to have to fork out, so small acts of kindness like this are very welcome – and may help repair at least some of the damage EA's reputation has suffered in recent months.

It's not a 'true' indie game, but the spirit behind *A Way Out* is invigorating. The specific action of robbing petrol stations, going fishing, sharing tender family moments and generally evading police capture might not be unique to this game, but the mechanics of the thing certainly are. Bespoke animations for each characters' interactions, countless incidental touches, some superb flourishes and a real need to cooperate combine into something that, for all its maker's bluster, more than lives up to its billing. ■



Rattling cages

Narrative-led titles aren't a rarity, even from large publishers, so it's unsurprising Fares has an opinion on the likes of Telltale and Quantic Dream's output: "Those games are too passive for me. I would like to have more control," he explains. "One could say that you control the story, but while you're doing it and affecting it, in a sense you're not, you know? *A Way Out* is not about that. I think the comparison is fine from a cinematic perspective, but not the way you choose your story. This is a hand-tailored story all the way." So, he's not about to try and make you Feel Emotion? "That's not important for me," Fares laughs. "I just want to make people feel the game. If they cry or they laugh or they smile or they get angry, it doesn't really matter."



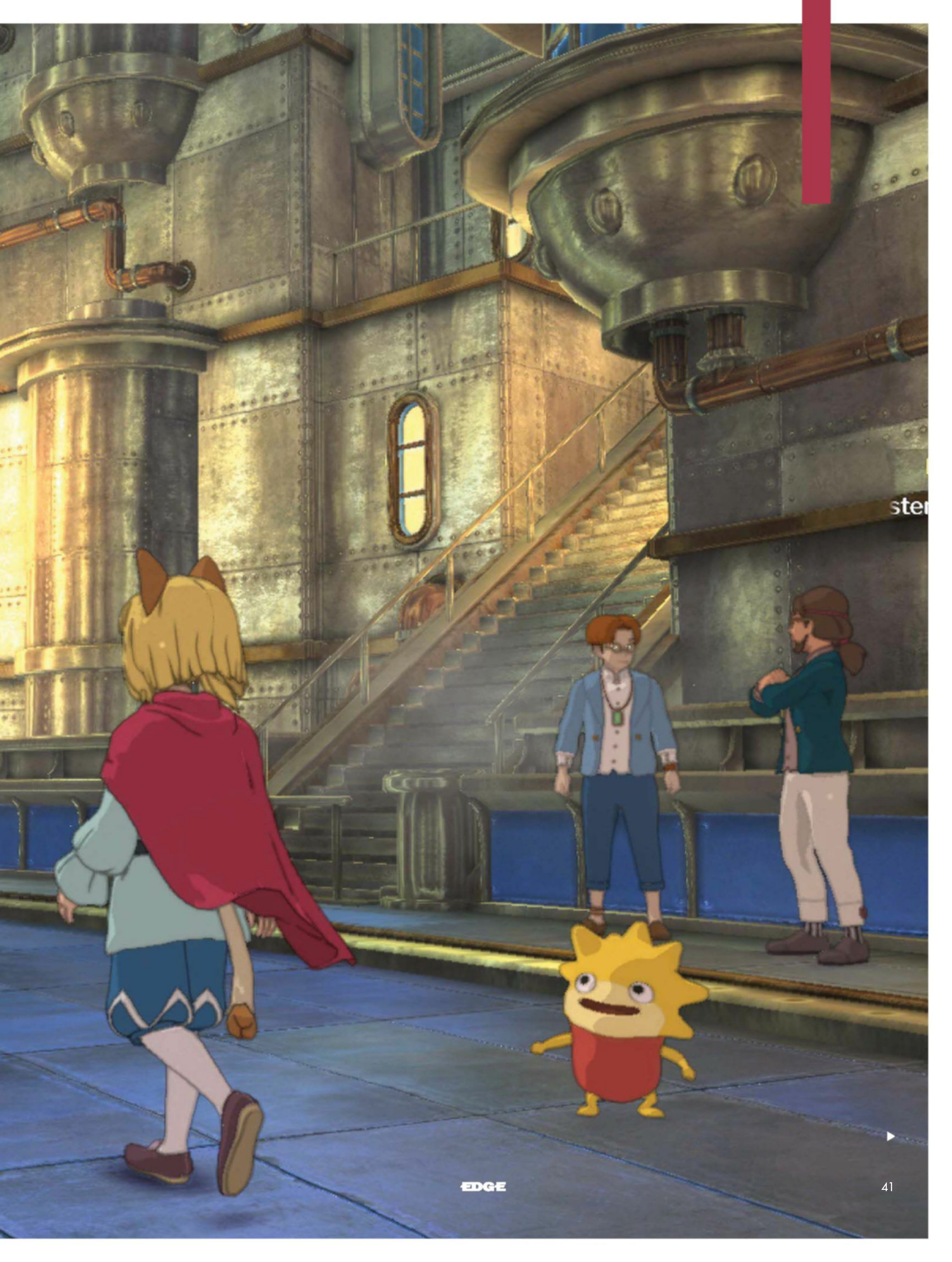
H Y
P E

NI NO KUNI II: REVENANT KINGDOM

In which a boy named Pettiwhisker must be somehow taken seriously

Developer	Level-5
Publisher	Bandai Namco Entertainment
Format	PC, PS4
Origin	Japan
Release	March 23

Ghibli has departed, but in *Ni No Kuni II* the unique blend of JPRG complexity and good-natured cats in waistcoats with regional accents remains. Thank goodness





NI NO KUNI II: REVENANT KINGDOM







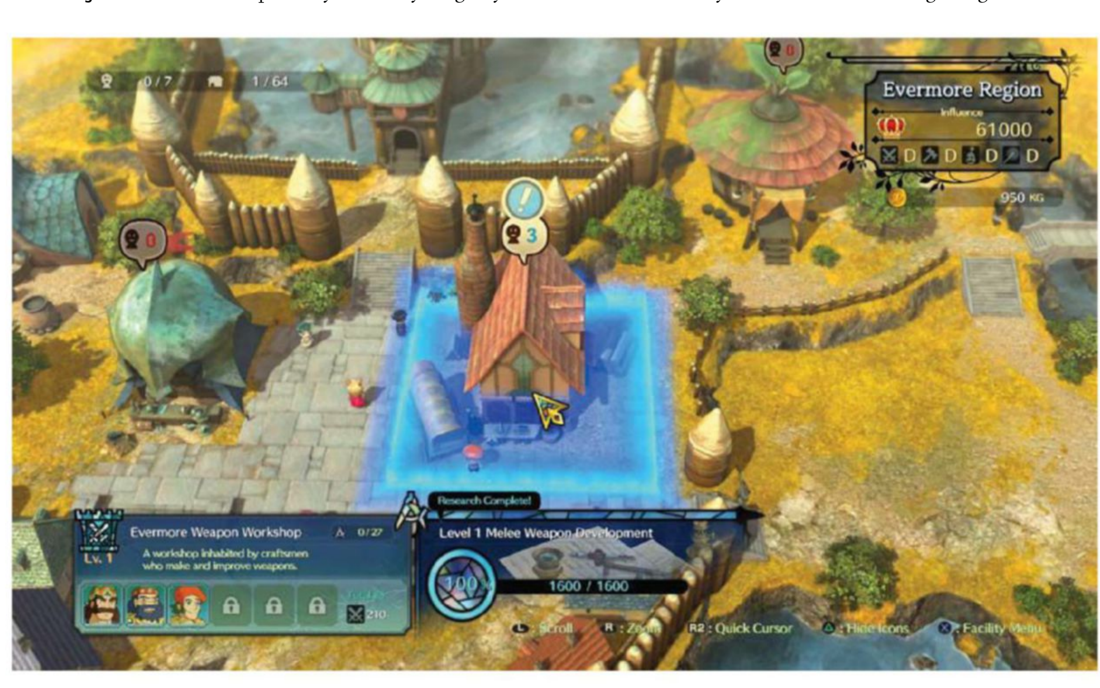
ABOVE **The faintly lacklustre macro-scale exploration view, rendered without much love or detail.**
LEFT **More Rupert the Bear than *Final Fantasy*, Ding Dong Dell warms the heart**

Can Level-5 do it again without Studio Ghibli's involvement? When the original *Ni No Kuni* arose from the doldrums of indistinguishable JRPGs in 2013, it did so on the strength of its looks and score, and with wonderfully localised characterisation that introduced the world to, among other delights, Drippy, the Welsh, lantern-nosed sidekick. These were firm foundations for any would-be franchise, yet they've been mostly abandoned for this sequel.

It's not a completely clean break. Ghibli's character designer Yoshiyuki Momose and composer Joe Hisaishi, veterans of the original game, reprise their roles here, and their touch is immediately evident in the first breathy string motif that accompanies cat-eared protagonist Evan Pettiwhisker Tildrum wherever he goes. Evan is an unashamed analogue of *Ni No Kuni*'s Oliver: like his predecessor, he's a wide-eyed and almost impossibly earnest young boy who must summon his inner strength to answer the call, with the help of an otherworldly guide. Unlike Oliver, whose hometown Motorville felt for all intents and purposes like the world we inhabit, Evan's home is the fairytale Ding Dong Dell itself. His otherworldly guide, the 48-year-old Roland (who looks no more than 21), is a more traditional accomplice than Drippy by orders of magnitude. The effect of framing this tale having already 'crossed the threshold' in hero's journey terms, and with a deeply familiar JRPG chap in tow, is underwhelming. Journeying into the fantastical with Oliver set up the original so wonderfully, after all. As much as it feels like spitting in a charity collection pot to temper any enthusiasm for a game as innocent as this, our limited taste of the story didn't demonstrate anything above or beyond the original's remit.

Mechanically, however, it's a very different story. There are new and beguiling wrinkles

Kingdom mode adds a welcome tactical layer, giving Evan licence to flex his regal muscle as town planner and HR department for the area surrounding his castle

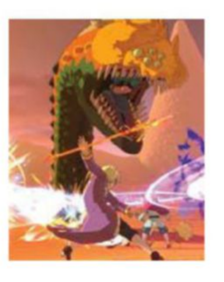






LEFT **While covering large distances between cities Evan is expressed in the chibi style, but here in the city things take a more lavish aspect as the camera hones in on every quaint detail.** BELOW **Never one to pit you one-on-one against a foe, *Ni No Kuni II* fills each encounter with party members, opponents of various size andferocty, and a veritable army of own-brand Pikmin**





everywhere in *Revenant Kingdom*, all proudly twee and all, on this evidence, truly for the better, rather than simply complicating ancient JRPG procedures for their own sake. Higgledies, for example — did we mention it was twee? — are new and colourful little mites who litter the floor of each battlefield, arranging themselves in groups in order to offer Evan buffs and abilities. Periodically they'll signal that their given power-up is ready, whereupon Evan skips over to their particular zone to activate it. Since Higgledies come in four elemental varieties, the nature of their helping hand differs accordingly. Fire Higgledies can be harnessed to create an enemy-proof flame barrier, and coordinating this mid-boss fight to avoid a particularly potent attack feels like a thoughtful way to expand a traditional battle. They're only as tactical as the player approaching them, though. Running haphazardly between groups of coloured Pikmin-alikes, activating buffs at random, has limited strategic value.

Looking at combat from more than six inches off the ground, *Ni No Kuni II* plays more recognisably. Foes come in 'disconcertingly cheerful animal' and 'enormous fiery beast' varieties, the latter indicating a boss encounter while the former makes up the numbers as you progress across the world map in chibi form. Bosses benefit from some visual flair and more characteristically brilliant voice acting (a nest of lizard-like foes we encountered relished in rolling every 'r' and stretching out every 's' to pantomime extremes), but it's the Higgledies doing the heavy lifting to make their encounters memorable, not the boss' behaviour itself.

Boss fights don't represent anything like the high point of combat spectacle here, though. That honour belongs to Skirmish mode, in which Total War and the JRPG join hands and commune in surprising harmony. Evan, a king after all, commands units of troops on the battlefield during these encounters, rotating their positions around him on the fly to create a favourable matchup with whichever enemy troops are up next. Bringing archers to the fore while foes are at a distance, and then swapping them for swordsmen just before the crunch of hand-to-hand combat, makes this entire mode feel worthwhile. If there's greater tactical depth than this simple bait-and-switch in the final release it's not yet evident, nor is it apparent how Skirmish mode fits within the broader framework of the game. What is clear is that its inclusion alongside fellow newcomer Kingdom mode (see 'The royal we') is a statement of intent from Level-5, which is evidently determined that this game will play tangibly differently to its beloved, but mechanically straightforward, ancestor. Perhaps this is the sensible point of emphasis, too: five years after that Ghibli collaboration resulted in such a delightful playable movie, fans will take the production values and the clever narrative throughlines for granted now. ■

Boss fights don't represent anything like the high point of combat spectacle here

It's a pleasant collection of pastel shades and gregarious regional accents, but the same was true of its predecessor; unlike its forebear, this game cannot trade solely on its aesthetics



The royal we

Although primarily a traditional solo adventure with its eyes trained on Evan, *Ni No Kuni II* fosters a wider sense of scale through Kingdom mode. The aim here is to expand Evan's castle and the surrounding territory, finding specialists to employ in specific areas by completing sidequests – a smith for your forge who'll enable combat buffs, a ship-builder for naval advantage, and so on – all gradually building a community. Without it, being king of the Cat tribe might feel like a weightless accolade. But with a socioeconomic system functioning beneath Evan, the sense of progression usually conveyed exclusively by sharper and more enchanted swords is allowed to permeate deeper.



INTO THE BREACH

FTL's makers return to terra firma to face a new alien threat

Developer/publisher Subset Games
Format PC
Origin UK, US
Release 2018

Most clichés have at least a little truth in them. 'Difficult second album' is one. How does a band follow up on a tremendously successful first release? What creative pressures does that bring? How are they overcome? How does that shape what comes next? Or, to put it another way, how does a developer like Subset Games follow up on a breakout smash hit such as *FTL*? The strategic spaceship sim has sold several million copies since its release on PC, its theme capturing the almost-universal appeal of being a starship captain, handling boardings and fires and prevailing against the odds with Kirkian guile. It's won design awards and spearheaded a mini subgenre of realtime, Roguelike disaster-management games while also expanding expectations for the creative ingenuity of indie developers. *FTL* is, in short, a big deal. So how has Subset Games, which remains just two-people strong, gone about producing its new game?

"We came to accept that *FTL* was probably the best thing we'll ever do, or at least that's what the public would think," programmer and co-designer **Matthew Davis** tells us. Through acceptance came freedom, once he and his development partner, artist and co-designer **Justin Ma**, had taken a breather after they finally finished working on *FTL's* port to iPad and an expansion, Advanced Edition, in spring 2014. "We were burned out after working on *FTL* for so long," Ma says. "We wanted to spend some time having fun with development again. So we made a couple of small prototypes and messed around with some ideas. We didn't want to feel the pressure of calling a project our next big game that we were going to put years into."

From this tinkering has emerged *Into The Breach*, a tight, rigorously contained micro-strategy game about mechs saving cities from rampaging bug aliens. It's not *FTL*. While *FTL* hinges on taking a journey through hostile space, weighty decisions coming back to haunt you as you engage in realtime combat, *Into The Breach* is turn-based, its levels taking place in eight-square-by-eight arenas of mountains, seashores and settlements. Rather than Star Trek wish fulfilment, it takes some of the spirit of *Advance Wars*, and mixes in a little *XCOM* and pure Roguelikes such as *Shiren The Wanderer*. It's still powered by *FTL*'s sense of high tension. Disaster hangs in the balance and one mistake can see the end of a campaign run, in which you command three mechs against an alien incursion across several randomly generated levels in each of the game's four geographically themed islands. As you complete them, you'll get to upgrade your mechs, honing their pilots' traits, buying new weaponry and improving their abilities. ▶





Justin Ma (top) and Matthew Davis resisted increasing the size of the team, despite *FTL*'s huge financial success



You'll power up both your mechs and the pilots inside as you progress through a campaign. If you lose, you can choose to send one pilot back through time for your next try



INTO THE BREACH



Each map consists of a randomly generated 8x8-grid battleground

In each level, you'll battle enemies which erupt from the ground over the course of just five turns. If you don't cull their numbers, your mechs will be overwhelmed. If you lose a unit, you'll also lose its pilot and its invaluable upgrades. If you fail to achieve a given level's objectives, such as defending a moving train or destroying a mountain harbouring more bugs, you won't be able to buy better weapons and equipment later on. And if you lose a city, the real problems set in. For every destroyed city, your Power Grid counts down by one point. There are ways of recouping it, but when it reaches zero, your run is over.

Into The Breach keeps all its stats low: mechs start with just two or three hit points, and hit for only one or two damage. The difference between full health and death for any unit can be a single turn. But on your side is *Into The Breach*'s defining property: every move and attack in Ma and Davis' game is

> ***"We wanted to spend some time having fun with development again"***

deterministic, and you always know what the bugs are about to do. You'll see that the leaping bug will, unless you can stop it, jump on that city next turn. Another bug will charge your damaged mech and deal exactly two points of damage. Another city will fall to a flying bug spitting goo at it. "I would be lying if I said I wasn't interested in trying to reduce randomness after the number of complaints that *FTL* had about it," Davis says. Much of the tension in *FTL* is down to the problems that come when the dice rolls go against you. *Into The Breach* instead hinges on careful deliberation as you consider the precise effects your weapons will have on the bugs to maximise your disruption of their plans.

The mechs' weapons are not only destructive, but can also cause secondary effects. Some can push bugs away, relocating their attacks to save a city, or shunting one bug into another, a mountain or even one of your own mechs, which will inflict more damage. Some weapons and terrain types can cause local effects, such as dust storms which prevent any unit inside them from attacking. And each mech has a very different loadout. Artillery shots don't require line of sight but do little damage, while hard-hitting melee attacks require close range. "Once we removed chance from the player actions, it became pretty clear that having a wide array of mechanics and systems that interplay with each other is the absolute most interesting part of the game," Ma says. "It became pretty important to make sure every single weapon has multiple uses, so the grappling hook for the Brute mech class can pull an enemy to save a building or be used to pull an ally. There are lots of ways that it can be used."

It's a profoundly layered game, with many different mechanics working together, influencing and playing off each other. Though levels are short, you'll pore over your tactical choices for many minutes, thinking through their intricate, dynamically set puzzles in which moving and attacking in the optimal order will wrest you from defeat to victory. "It's the most enjoyable type of game to develop, because even years after working on it I can still enjoy it, encountering new strategies and getting surprised once in a while," Ma says.

"We still come across interactions between mechanics where we don't have a solid design for how they should combine," Davis adds. "Every day we have design discussions about what should happen if the enemy is frozen and they have acid and they're pushed into water. It's gotten to the point that we've had to stop making new mechanics. They now have to act with ten, 15 others, and it's just too difficult."

It's taken a long time for this fabulously intricate game to find its deterministically driven focus, which didn't become apparent until two years into development. And even then Ma and Davis knew it lacked a hook as powerful as *FTL*'s. "It doesn't have that really easy thing to grab on to and have fun with, but as that became apparent, we didn't shy away from it," says Davis. "It isn't something that has to be in every game we make. It was more about what works best for the game we're making." The sheer nuance and depth of *Into The Breach* is a testament of what comes from not trying to live up to all past successes, and letting new work stand on its own. ■



Perfect information

A game as deterministically driven as *Into The Breach* wouldn't work if what the bugs will do next and the effects of your next action were unclear. "Yeah, I'd say that probably without exaggeration, the majority of our development time has been spent on the UI!" says Ma. Somehow, despite its pixellated and clean presentation, everything you need to know about what will happen when you land an artillery shot on a certain tile is completely evident, from the way that units will be moved, the damage they'll incur as a result of smashing into each other and the positions in which they'll end up. It's so honed, in fact, that Subset can't add any new features to the game, simply because the interface can't squeeze them in.





TOP **The islands on which you battle each feature different leaders who berate and congratulate you for your (in)ability to protect them.** ABOVE **Chris Avellone, who also contributed to *FTL*, is writing for *Into The Breach*, though dialogue and story are more incidental here.** MAIN **Where the Vek will attack is marked by hatched red areas; the type of attack and its effects are detailed in the bottom left corner**

TOP **Some levels feature environmental threats. Flooding turns a line of land to sea each turn, giving you even more to consider.** RIGHT **The game features six very different mech squads to play as, each favouring a style of combat**



Mitsurugi resumes mascot duties for the timeworn fighting-game series as this sixth instalment looks to pull in a casual crowd

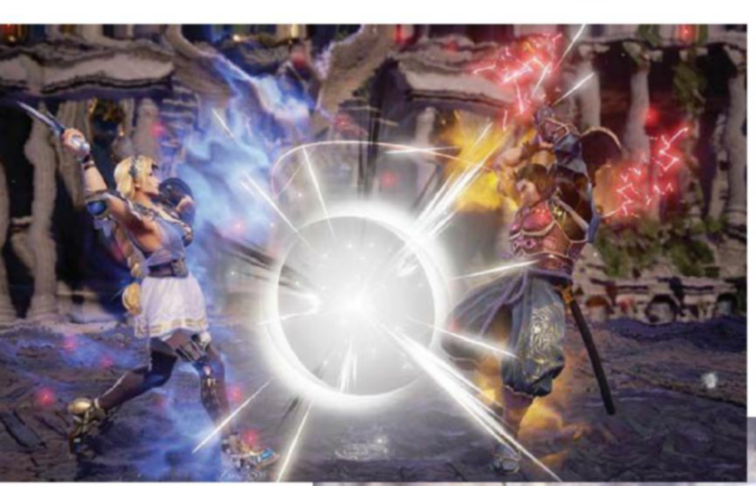


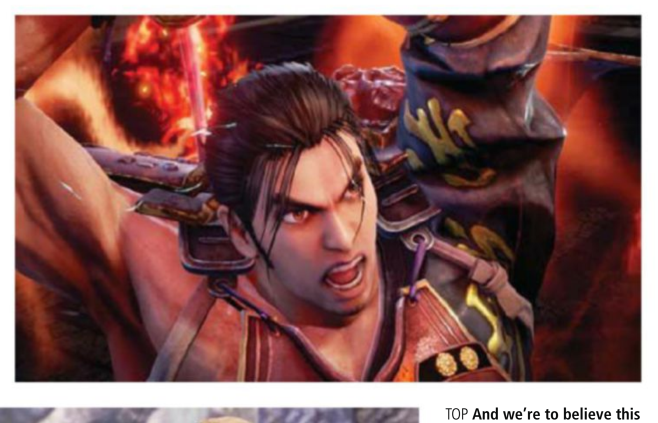
HYPE

SOULCALIBUR VI

Five years of blade-sharpening later, a warrior legend returns

Developer	Project Soul
Publisher	Bandai Namco Entertainment
Format	PC, PS4, Xbox One
Origin	Japan
Release	2018





TOP **And we're to believe this happened by accident, are we? It's not like the action is lacking, so there's really no need for this route-one approach to marketing.** ABOVE **Fire and/or brimstone: the first port of call for any fighting game designer's colour palette. When the Critical Edge attacks are deployed, things get heated.** ABOVE LEFT **How do you know whether you've successfully countered a Guard Impact, or merely mashed the buttons in nonsensical order? Oh, don't worry. You'll know.** LEFT **With only two characters revealed thus far, the final roster (and proportion of returning treasures such as Voldo and Lizardman) will play a key role in the game's fate**



SOULCALIBUR VI

Old adversaries stand before one another, bobbing gently at the knees and dressed from head to toe by the male gaze. They're about to engage in an immaculate display of weaponised fisticuffs which, as masterfully smooth and complex animations play out and items of clothing pop away as though a soft-porn producer is calling the shots from on high, shows both how far *Soulcalibur* has come in 20 years, and how awkwardly it remains stuck in the past.

Above the ground-level fundamentals, *Soulcalibur VI* seeks to layer in new levels of complexity with gauge-based systems which affect the ebb and flow of each encounter. Some of those systems are positive, while one's sure to be unpopular with the competitive set. One in particular, the returning equipment-breaking system which treats the disrobing of a bundle of over-endowed polygons as some sort of reward, feels like an unwelcome relic, a staggering act of tone-deafness that shows how little attention Namco's fighting-game teams pay to the world outside their walls.

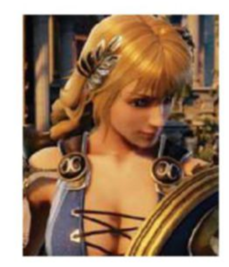
As you'd expect, at its core it plays much the same way the series always has, and it's no surprise to find that neither Mitsurugi nor Sophitia, the only two available characters in our demp, have been subjected to radical redesigns. The former still utilises his sword for balletic medium-speed attacks, while the latter jabs away at opponents' nether regions at rapid speed. As if it needed to be said, doing either of these is deeply gratifying in the most direct sense, such is the grace of each fighter's movement and the poise between them.

Innovation in fighting games these days tends to be measured in gauges, and predictably enough the new or iterated-on features in *Soulcalibur VI* largely revolve around the Critical Gauge, introduced in the previous game. Fill it up by dealing damage or by blocking incoming hits, and its contents can be spent on Critical Edge attacks — this series' equivalent of super combos, in which players are rendered passengers while an endearingly overstated and devastating damage-dealing sequence plays out. Critical gauge is also the currency behind Soul Charge and Guard Impact moves, used for self-buffing and extra-powerful counters respectively. Guard Impact can even defend against unblockable attacks; it's the sort of addition that will delight the tournament scene while also giving the less-invested player a means of countering what they perceive as cheap play.

Yet the latter group will be more thrilled by the new Reversal Edge mechanic. It's unashamedly intended as a way to alleviate that intolerable feeling of being juggled helplessly until death by a more skilled player, and, if you pull it off, gaining some momentum. Activated with a single button press, Reversal Edge initiates a dramatic slow-mo which resets the action and has each player choose a single attack, second-guessing each other in order to strike first, and strike hardest. Mitsurugi's slow vertical attack, for example, is a high-risk strategy during a Reversal Edge. Sophitia's crotch-busting low punch, however, is a comparatively safe bet. It's rock, paper, scissors, in other words, albeit with more potential outcomes and played with melee weapons from feudal Japan. Project Soul says it expects the system to be used less and less as players become more proficient, perhaps self-governed by a kind of honour system in tournaments, and intending it to enable newer players to feel masterful every now and again by using it to turn the tide against a more agile adversary. A similar system, Clash, featured in *Injustice 2* last year, however, and rather blunted the flow of high-level play; given the flair with which Bandai Namco implemented slow-mo into *Tekken 7*, perhaps it has earned the benefit of the doubt for now.

> ***For all the tinkering, the main takeaway from the day is what's under Sophitia's skirt***

Only, however, in terms of mechanics. For all Project Soul's tinkering under the hood, the main takeaway from the day is what's under Sophitia's skirt. She starts the round dressed to scandalise, and thanks to that equipment-breaking system, often ends it in little more than a vaguely Grecian bikini and heels. It's embarrassing for everyone involved — except, unfortunately, the developer, which becomes the latest in a long line of creators failing to spot the difference between honourably serving your fans, and cringeworthy fan service. ■

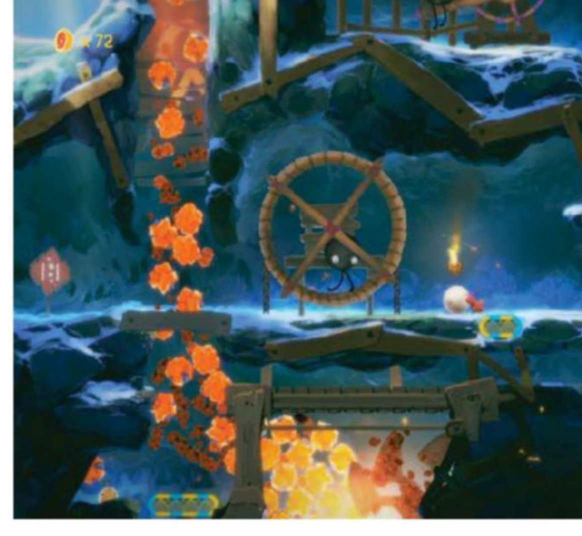


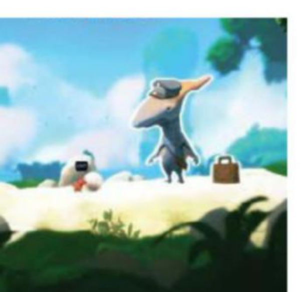
Don't dream it's over

After 20 years and five prior outings, *Soulcalibur 6* will mark the series' first appearance on PC. It's well-tuned to impress those with a more technical eye waiting in that platform's ranks, too, such is the devotion at Project Soul to maintaining that Teflon-smooth, Dreamcast-esque performance and rounding off every polygonal edge. The game's most recent preview build appears rock solid throughout each bout, regardless of how many Unreal Engine 4 effects are blossoming and combusting on-screen. Through some clever alchemy – perhaps thanks to fewer post-processing effects – Soulcalibur VI looks every bit the 2018-era Dreamcast game that exists only in your head.

Developer Villa Gorilla
Publisher Team 17
Format PC, PS4, Switch, Xbox One
Origin Sweden
Release 2018







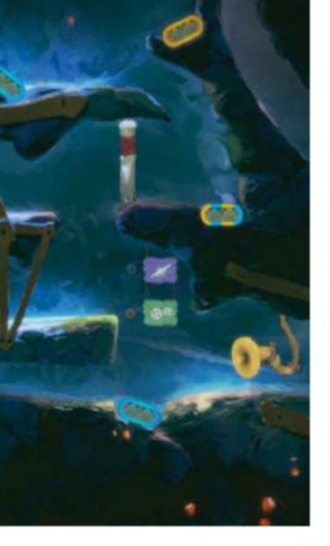
YOKU'S ISLAND EXPRESS

This charming pinball adventure simply wants you to roll with it

Pinball and exploration hardly seem the most natural bedfellows. Mind you, neither do pinball and military strategy, and that didn't stop Yoot Saito making GameCube curio *Odama*. But having settled on its unusual combination – and an unlikely hero in Yoku, a dung beetle tethered to a ball – Swedish indie Villa Gorilla realised its debut was developing an identity crisis. "We did some focus testing and realised it was a very stressful game," co-founder **Jens Andersson** admits. "Which is inherent to pinball, really: it's focused for short bursts of time, and that didn't mesh well with the exploration." The solution wasn't to lower the difficulty so much as reduce the punishment for missing a shot – or, as Andersson puts it, "to make it more chill."

It's a decision that pays off handsomely. *Yoku's Island Express* might lack the flashing lights and furious noise of your average pinball table, but the pleasure in arcing the ball smoothly around a loop or across a rail is undiminished by the relative lack of spectacle. Missing the intended ramp is never disastrous; yes, you'll still want to avoid draining the ball,

Reach a telescope, and the camera will zoom out to show the local area – this, however, is just a tiny fragment of the world map





LEFT **With no bumpers or flippers at the top of the mountain, Villa Gorilla can pile on the wind and snow effects, though it's prioritised readability elsewhere. Andersson says: "It's more important to be clear what's going on than to be pretty"**



TOP LEFT **Not all Yoku's unlockable abilities are mandatory, Andersson tells us; some will be entirely optional, rewarding more thorough explorers.** ABOVE **Interactive objects are colour-coded: blue for the left trigger, orange for the right. Some bounce pads can be activated with either**

since clusters of thorns lie between each set of flippers, and touching them means losing some of Yoku's supply of fruit. Yet these can be quickly replenished by hitting nearby targets. As such, a game where you're often moving at speed feels oddly relaxing, which fits with its developer's desire to let you traverse this surprisingly expansive world at your own pace. Sometimes discoveries come about by happy accident, a mistimed flip taking you somewhere you weren't intending to go, but which rewards you anyway. "Missing a shot should still be fun," Andersson believes, though the chests and collectible critters that lie away from the critical path tend to require more skill than luck to reach.

If neither of the playable chunks in our demo comes to a natural ending, that's because they're part of a much larger whole. "We didn't want to just have pinball tables linked together," Andersson says. "That doesn't really interest us as developers. We like building worlds; we like having a story." As such, though the biomes are diverse, the environments will flow seamlessly into one another, with artist Mattias Snygg responsible for the lush, hand-painted look. "I worked with him back at Starbreeze when we did *Chronicles Of Riddick*," Andersson tells us. "Painting is definitely his strength so we wanted to leverage that."

This rich and characterful world is gated in a familiar fashion, although Yoku's abilities are anything but orthodox. They're unlocked by feeding fruit into totems. Our first toy, a noisemaker, stirs a slumbering creature into starting up a fan, which carries us up a vent to a snowy peak – once we've closed both external hatches, at any rate. Later, we gain the power of a slug vacuum, and attract explosive gastropods that detonate when the ball collides with obstructive rocks. Elsewhere, a giant eel halts our progress until we bring him a mushroom that grows on the cliffs above. At the top we collect our prize, but also locate a poison toadstool nearby. Both, it turns out, can be used to solve the problem; it merely depends on whether you're feeling benevolent or spiteful.

"We didn't want to just have pinball tables linked together. That doesn't interest us"

With such a bright, attractive setting and characters, *Yoku's Island Express* should have wide appeal, though Andersson is curious to see whether the speedrunning community latches onto it. Indeed, there will be sequence breaks in the game for experienced players to exploit. "Throughout development we've discussed this specifically," he says. "The slug vacuum is pretty much a rocket jump: it's one of those manoeuvres that, from a design point of view, we don't necessarily expect the player to use, but since they can, we need to support it. We had the choice of either removing that feature, or support massive sequence-breaking in the game." Naturally, it's been kept in – well, it's not called *Express* for nothing. ■

Bear left from the start and you'll float over to an island, though we'd be surprised if there wasn't an ability that let Yoku head underwater at some point



Ball bearing

Early on, Villa Gorilla considered a variety of design concepts, eventually settling on pinball for pragmatic reasons: its avatar was a ball, and it didn't have an animator on the team. "We do now, though!" Andersson laughs. "But that was a fun joke that stuck with us – we could take it quite far without adding resources to the team." Yet as an adventure, rather than an action game, it soon needed a new lead; it was studio co-founder Mattias Snygg who suggested a dung beetle. "We liked that because, well, it's underused in videogames. But it also has something that adds to *this* game. We're playing with scale – you're this tiny character coming into this big world, and when we tethered him to the ball with a rope, it became kind of comedic."



Developer/publisher Numantian Games
Format PC
Origin Spain
Release TBA



THEY ARE BILLIONS

Command and conquer a zombie apocalypse

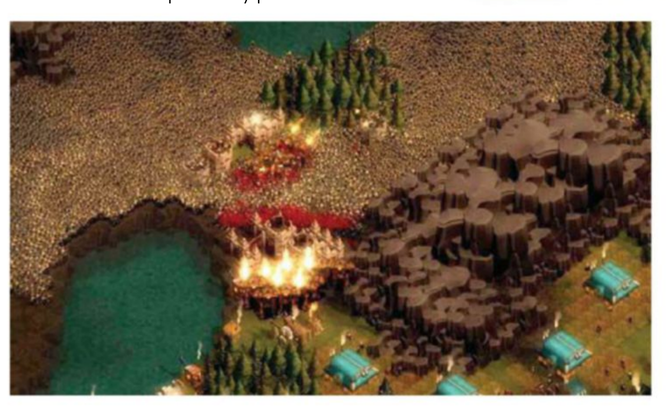
What happens when you put zombies into an RTS? The answer almost writes itself. You get a defence-based survival game in which instead of a rival army, you face hordes of shambling walkers, something guaranteed to instantly capture the attention of hundreds of thousands of players. And that's exactly what the histrionically titled *They Are Billions* has achieved in its opening weeks in Steam's Early Access.

One of the game's great strengths is that it feels utterly familiar to anyone who's commanded and conquered. You start the game with a command centre, from where you construct all other buildings. There's a Protoss-style pylon system: you must power areas of the map with Tesla towers before you can build on them. There are *Warcraft*-like resources scattered around the randomly generated map which you must exploit in order to gather the materials to construct further buildings. Forests provide wood if you build a sawmill next to them. Iron and stone deposits require quarries. You need workers to man each building and provide offensive units, and that means building tents and cottages to house them; they in turn demand food, which you can provide by building hunter and fisherman's cottages near plains, forests and bodies of water. And then you can invest gold into researching new technologies, which unlock better tiers of structures.

This cascade of resource requirements continually pushes and pulls you to expand your base to produce the stuff you need to build better defences. It's perhaps unfair to call *They Are Billions'* title histrionic, since one of its immediate party tricks is that it really does throw hordes of undead at the player. Though single zombies can be picked off in a few shots from a bow-slinging Ranger, groups of them can reach outer defences surprisingly effortlessly. A good *They Are Billions* player, therefore, does not only manage resources but also the art of tower defence – of anticipating from where attacks will come, using terrain as natural defences and devising various ways of diverting the hordes into wicked kill-corridors to expose them to turret fire, placing stakes to slow and damage them.

As such, the focus is not on building armies of its six unit types and micro-ing them into constant combat. Nevertheless, you'll still be sending troops outside the walls of your settlement to clear areas, particularly Doom Villages, groups of buildings that fill with the infected. *They Are Billions'* zombies are attracted to sound, so these thickets of the dead could bring tens of attackers to attack your settlement. Higher-level units, such as the flame-throwing Lucifer and melee-specialist Thanatos, are designed specifically for attack rather than defence.

One of its party tricks is that it really does throw hordes of undead at the player



ABOVE **By the end of a game, the hordes you face are truly vast. Survival is often a matter of retreating to the centre of your city, having cashed in all superfluous buildings so you can invest in troops and towers in a final, last-ditch defence**



LEFT **Each building has a health bar topped by an orange section, which when exhausted means the building is disabled until you repair it, once no zombies are nearby.**
BELOW **The Ranger makes no noise, and is as such a good raiding unit for the early game, but it fires slowly**







Defensive walls are restricted by the rule that you can only build them three layers deep. Early on, turrets have to be occupied by units, raising their range. Later you get the far more powerful Ballista

But really, you'll be preparing for the ten large-scale waves of infected that you'll face in each game. Rather counter-intuitively, setting yourself a shorter time to survive increases the challenge, because you'll have less time to prepare for each wave. Balancing building strong defences with base expansion, all the while reducing the size of the hordes, is critical to success, since any undead doing damage to your buildings will infect them, turning their inhabitants into new walkers. Even a small incursion can lead to the start of a chain reaction which ends in your command centre being destroyed.

As a game which has only just launched in Early Access with a single mode, Survival, across four map types and different skill levels, *They Are Billions* is only just getting started. Developer Numantian Games is touting a forthcoming campaign as the core of the game, promising a 40-hour storyline and various new systems and structures, such as steam trains and fortresses, to find in the world. But one thing it would also do well to build upon is greater choice over different approaches to survival. At present, specialised settlements are never as strong as those which cover the full spectrum of defences and resource gathering. Such immediate success, however, is likely to provide the necessary feedback to push *They Are Billions* in all the right directions. ■

Zom populi

One of the most satisfying aspects of *They Are Billions* is that its maps are populated by a finite amount of the infected. Clearing areas really does clear them away; they aren't arbitrarily spawned in, other than as a result of the ten hordes you'll be facing. From Doom Villages will emerge certain blends of infected that depend on their sizes. Smaller ones will yield weak Decrepit infected, while larger will house fast Runners. In the largest villages, you'll face special infected. Harpies can jump over your walls, for instance, while the Chubby is incredibly resilient. The ten hordes you face will often also gather wandering infected and bring them along for the ride, so it's always a good idea to thin out numbers as much as possible during quieter times.

PALADINS: BATTLEGROUNDS

Developer/**publisher** Hi-Rez Studios **Format** PC, PS4, Xbox One **Origin** US **Release** 2018



The name may suggest that this is simply the latest in what we all assume will be a very long line of *PUBG* riffs, but as a sideways expansion to an overlooked free-to-play game this feels more like a response to *Fortnite: Battle Royale* than to Brendan Greene's real deal. To be fair, Hi-Rez's game has drawn a playerbase of respectable size on Steam, and just as *Fortnite*'s base-building added lots to like to the formula, so does the notion of redressing the battle royale as a class-based hero shooter. Roll your eyes by all means, but beware; there's likely to be a good deal more of this before the year's out.

STAR CITIZEN

Developer/**publisher** Cloud Imperium Games **Format** PC **Origin** UK, US **Release** TBA



Chris Roberts' impossible dream made more money through its bespoke crowdfunding model in 2017 than all videogame projects on Kickstarter combined, yet progress on the actual game continues to be achingly slow. The newly released alpha 3.0 – yes, apparently that's now an acceptable version-naming convention – adds explorable planetary surfaces and a host of systemic improvements. Everyone seems to be waiting for the project to implode, but Roberts and team press on undeterred. Having all the funding in the galaxy must help, we suppose.

PSYCHONAUTS 2

Developer/**publisher** Double Fine Productions
Format PC, PS4, Xbox One **Origin** US **Release** TBA



Double Fine's Fig-funded sequel has slipped off the 2018 calendar entirely, with the developer declining to even put a new date on the game. From what we've seen, it's no surprise: this is a far bigger and more beautiful game than the original. If that extra time avoids another Meat Circus, we're all for it.

TOTAL WAR: THREE KINGDOMS

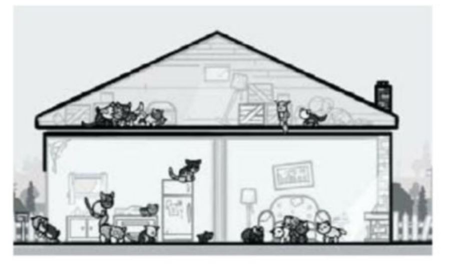
Developer Creative Assembly **Publisher** Sega
Format PC **Origin** UK **Release** September



Few studios are quite so prolific as Creative Assembly, and the developer's sleepless streak seems set to continue with *Three Kingdoms*. It's a stylistic departure to boot, taking the series to China for the first time – where, coincidentally we're sure, paid PC gaming grows ever more lucrative by the day.

MEW-GENICS

Developer/**publisher** Edmund McMillen, Tyler Glaiel
Format PC **Origin** US **Release** TBA



Edmund McMillen's most bonkers game was put on indefinite hiatus while the *Super Meat Boy* man focused on *The End Is Nigh* and the birth of his first child. Now, with the help of Tyler Glaiel, he's returning to this strange game in which you breed mutant cats and enter competitions with them.

#316

VIDEOGAME CULTURE, DEVELOPMENT, PEOPLE AND TECHNOLOGY



M A K E

In Dreams, Media Molecule hopes to restore our faith in art for art's sake

By Jen Simpkins


B E L I E V E



Game *Dreams*
Developer Media Molecule
Publisher SIE
Format PS4
Release 2018

Dreams, appropriately enough, is something of an abstract concept. So abstract, in fact, that even Media Molecule has had trouble communicating what exactly it is. First announced during Sony's E3 2015 conference, a surreal trailer showed painterly visions of polar bears, aliens and pianos, preceded by a single sentence: "Everything you see in this teaser was created on a PS4 in *Dreams*". Beautiful, but indistinct, it wasn't an instant sell – and Media Molecule's tentative explanations began, raising more questions than they answered.

Was this a spiritual successor to the studio's *LittleBigPlanet* titles, or something altogether different? A game, or a game engine? A set of tools capable of producing the next indie hit, or some sort of social experiment? The magic and, in some ways, the misfortune of *Dreams* is that it is all these things at once. It's a creation game unlike anything we've seen on a console before, letting you design, code, sculpt, score and animate just about anything you can imagine to create games, short films, paintings or interactive scenes – easily, quickly, and in unprecedented detail.

If you'd rather not worry about fine-tuning every single thing, however, you can use other players' character models, or songs, or animation rigs in your own projects. Conversely, if you're a perfectionist, perhaps you'll dedicate your time to sculpting, say, chairs: no games, only chairs. Fantastical, impossible chairs; chairs that draw people to your work and to you, The Chair Expert. You could find like minds to collaborate on projects with. Or you could simply go surfing on a near-infinite sea of other people's dreams, constantly surprised, often delighted and sometimes even a little bit scared by the things you see and play. It's a crowdsourced game-slash-art jam that never ends, to which anyone with a controller can contribute, and the results of which everyone can enjoy.

Imagine trying to explain all that on the back of a game box – one that children, teenagers, adults and grandparents will pick up and briefly scan, before setting it down and moving onto the next, likely more understandable one. The old *LittleBigPlanet* tagline, 'Play, create, share', is back, and helps package up *Dreams* into something more readily recognisable as a consumer product, rather than a powerful piece of software, or a new ▶

IT'S A CREATION GAME UNLIKE ANYTHING WE'VE SEEN ON A CONSOLE BEFORE



RIGHT **Media Molecule's founding five members. Back row, from left: Mark Healey, Siobhan Reddy and Kareem Ettouney. Front row: David Smith (left) and Alex Evans**



ABOVE **Art's Dream is one of three distinct worlds in *Dreams*' campaign. The imposing figure of the train conductor is something of an antagonist in Art's romantic noir tale**





IMP MY RIDE

The lack of a single, Sackboy-esque mascot for *Dreams* adds an extra layer of difficulty to an already tricky marketing challenge. For now, the solution seems to be the Imp. Akin to the head of a Pikmin, the cheerful little scribble essentially serves as your in-game cursor, allowing you to play with interactive elements of various dreams, moving objects and editing creations. It's even shown to 'possess' your controllable characters, living inside of their heads – or, in the case of Frances, hopping into a backpack – as you move them about. Like players' personal 'Home' areas, The Imps also allow for an element of player customisation and expression. You can change their colour, appearance and add accessories to doll them up, including charmingly realised glasses, headphones and animal ears.









ABOVE **The gradual process of dressing a scene is surprisingly intuitive. With furniture and a few well-placed lighting nodules, you can rapidly add depth and character to creations**



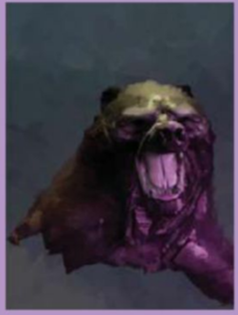
ABOVE **In *Dreams*, any aspect of game design can be as simple or as complex as you're comfortable with. Above, you can see a basic platform that moves when a character reaches a trigger zone – in this in-game view, the building blocks of its code have simple visual indicators. Below that is an example of the accessible 3D sculpting mechanic, manipulated into gorgeous complexity by an adept artist**

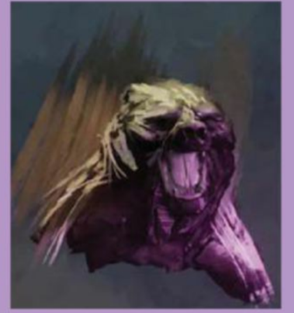












kind of creative community. It is like trying to disguise a bakery's window display as a Pop-Tart – but an accessible marketing angle is crucial, and Media Molecule knows it.

In that context, *Dreams*' three-pronged campaign, Art's Dream, has a crucial role to play. "We learned from *LittleBigPlanet* that it's essential to make a game with the creative tool, as Media Molecule," art director **Kareem Ettouney** tells us. "Without a game, it loses its focus. But it has an odd identity – it's a demo, it's an example, it's a tools-testing apparatus. It's keeping us from being over-academic. It has a lot of jobs, as well as trying to be a game."

At first, it's a cutesy, one-or-twoplayer co-op platformer starring a hammer-wielding teddy bear called Frances and her companion, Foxy, with giant shape-sorters, pressure-plate puzzles, and enemies to bash about. Soon, the scene melts into Art's world: this is a muted, noirish point-and-click adventure with a gangly hero plodding around. Another doze later and we're suddenly a cyber-beetle who wouldn't look out of place in a Pixar movie. Confronted with the sight of its fellow creatures dying of a nasty virus, Debug is off to find the source of the trouble: we use its mini EMP to activate moving platforms and create electrical current paths onward.

None of this is groundbreaking, admittedly. A degree of mechanical familiarity is important, however, in order to demonstrate what is possible elsewhere in a language that players will understand. Cutscenes, voice acting, sound effects and inventory systems: all are created in engine, and all are presented in a meandering structure that foreshadows the

DREAMS' CREATION MODE OFFERS UNPRECEDENTED SOPHISTICATION

wider experience of 'playing' *Dreams*. "The act of [creating the campaign] was not the most pleasant thing, because it's a guinea pig," Ettouney admits. "But without our game, we'd have no *Dreams*."

And what a terrible thing that'd be, because *Dreams*' real story begins after its campaign ends, with a creation mode that offers unprecedented sophistication and freedom. Premade assets are put aside in favour of giving players total control over every pixel, note and piece of code, as well as access to an ever-expanding database of user-generated content. The prospect is intimidating, in a way, perhaps even off-putting to those not naturally creative. But *Dreams* is designed to encourage anyone to create something as small as a cartoon drawing or as ambitious as a firstperson shooter campaign, regardless of their artistic or technical experience. ▶









ABOVE **"At one point, *Dreams* was only in a tight style – with crisp, sharp edges," Evans says. "We didn't have the loose, painterly style. It sounds obvious now in retrospect, but adding it was really liberating for people who didn't think they were great painters. Because when you go tight, you've got nowhere to hide"**

"We want to democratise creation," creative director **Mark Healey** says. "I'm a big Commodore 64 fan, and one of [Commodore founder] Jack Tramiel's key things was that he wanted to democratise computing. He wanted to put it in the hands of people who aren't necessarily privileged enough to get expensive computers and things. At some level, I do like looking at *Dreams* like that."

It all hinges on easing players in gently. The campaign does that job; so to do what the studio is currently calling 'ready-to-be-finished' dreams, a series of introductory levels that ask players to make specific elements of a premade level (pruning a tree, for example) in order to get them comfortable with the basic tools. "They're almost a campaign in their own right," says **Siobhan Reddy**, studio director. "I think, quickly, people will start filtering off and saying, 'Oh yeah, I want to be doing that'. It's interesting how detailed people get really quickly."

We start to see how it might happen once Healey picks up a controller and begins to tinker around in a blank level. The process of making a game simply flows, in the manner a lucid dream might, thanks to the ease and speed of using *Dreams*' toolset. After six years creating the software, Healey is more accustomed to it than most, certainly – but at every point, we can see and understand what's happening. He selects a cube from a shape menu, and a steely grey from a pop-up colour palette, placing the cubes in a group using the DualShock's motion controls, rotating them and altering their sizes. Adding a few variations of grey tone to the selected colour palette (the game randomly selects from the colour mix as shapes are placed), and a few spheres, soon produces a realistic clump of rocks.

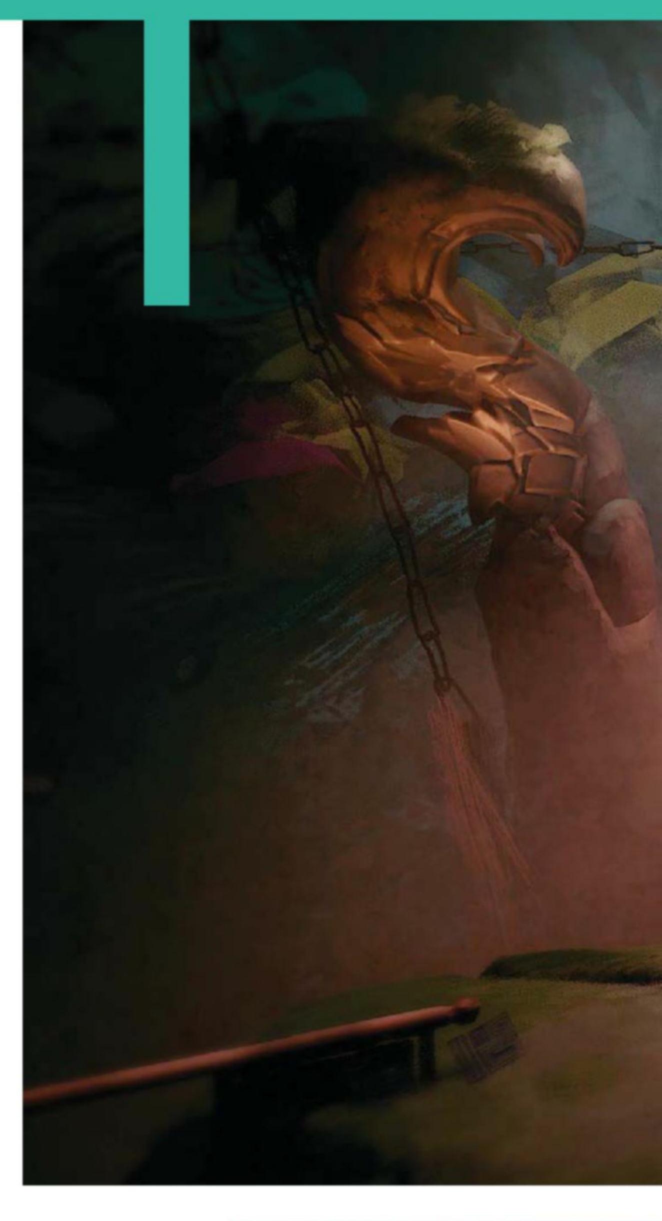
In a flash, these are copied and pasted, spread around the level, with some enlarged and rotated to form a valley. Another tool allows Healey to paint grass in swift strokes. Within minutes, the beginning of a 3D level has formed – and, by the looks of it, it's nothing we couldn't do ourselves in a similar amount of time. Next, Healey searches *Dreams*' user-created content database for 'platform', plucks out his favourite example, and places the

WITHOUT A LICK OF EXPERIENCE, YOU CAN PROGRAM SOMETHING IN AN INSTANT

asset into his scene. We suggest the platform could move: that's easily done, simply by pressing a Record button, picking up the piece and using motion controls to drag it back and forth, the animation automatically looping. With a little imagination and some impromptu artistic tweaks, a piece of platform becomes an enemy, popping up to snarl at any would-be trespassers (and dealing damage, should we so wish).

We note how, in a platformer, the camera angle might swing out from over-the-shoulder to offer a side-on view. Healey sets a camera in the correct place and direction, then takes a trigger zone – visually depicted in the 3D space as a yellow sphere – and places it just before the moving platform, drawing a line between it and the new camera node. When the player character reaches the zone, the camera angle transitions in one fluid motion. Without a lick of game-development experience, you can program something in an instant. "It's great that we can demystify the dark art of programming," Healey says. "This is essentially what 'real' game-coding boils down to – it's just presenting it in a different way."

Everything can be hand-built, or is a simple search term away, with all the tools you need to create an interactive masterpiece handily contained within a single space. There are very few limits as to what you can magic into existence, and so imagination is allowed to run riot. "It's that console ▶



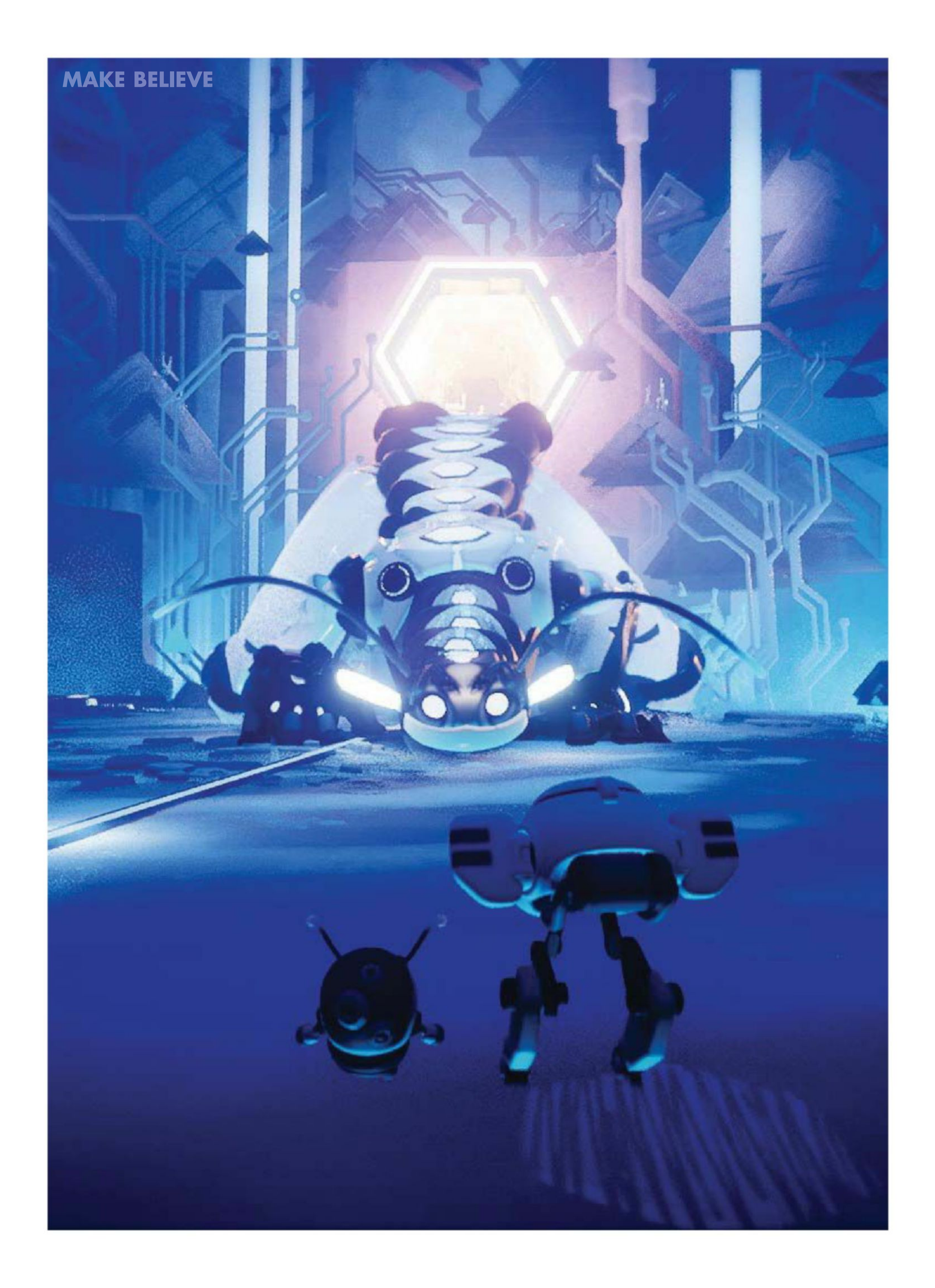
ABOVE **Frances and Foxy's campaign journey has been designed for twoplayer co-op. If you're playing solo, the AI will automatically control the other character. It's an early hint that you'll be able to use, or even program, AI in the creative mode**







ABOVE **The lifeblood of *Dreams* is the creation tool – but the play experience is crucial to win over those who "might never want to touch Create, never want to even draw a dot," Healey tells us. It's still a rewarding experience, but in a more literal sense: playing the campaign presents the opportunity to collect prize bubbles filled with decorative items players can use to personalise their Home bases**



experience," technical director **Alex Evans** tells us. "You've got Game Maker, and Unity, and all these other wonderful ways of creating, but I'd say this is much more like a sketchbook. It rewards relaxing, sitting on your couch, maybe not being 100 per cent sure where you're headed – you're just doodling. And then it turns into something wonderful."

For art director Ettouney, a trained architect and fine artist, ease of use is key to encouraging artistic expression, especially when it comes to sculpture. "The more you look at a user interface, the less you are looking at what you're doing, and that divorces you from doing it," he says during his demo, using two PlayStation Move wands to conjure up a Brutalist, neon-lit apartment block. Motion controls, integrated menus, and the ability to switch between Play and Create modes with a button press all encourage you to experiment. Ettouney drops a premade character into his scene: he quickly realises a staircase is not to scale, and makes it smaller in seconds. A wall is recoloured with the wave of one wand, while a river is painted in and made to flow with a click of the other. "Because I'm able to change gear like this, it allows me to think in a different way," Ettouney says. "If it's a nuisance or a pain, if you had to keep menu-chasing, you just wouldn't do it. We wanted to give people back their time, and create a culture of techniques."

Every creative discipline in *Dreams*, from music to animation, is designed to be intuitive first, specialist second. A tune can be composed, almost conducted, using the DualShock's motion controls. You simply move a cursor up and down a set of axes in a pop-up window, thereby playing the instrument you've selected. The default animation process, meanwhile, is heavily inspired by Jim Henson's work: drop in (or create from scratch) a rigged character, and you can puppeteer them with motion controls and buttons. Neither of these approaches produce super-slick, pinpoint-accurate results. But with another button-press, you can open up a new window containing a sophisticated music production setup that's a dead ringer for

THE DEFAULT ANIMATION PROCESS IS HEAVILY INSPIRED BY JIM HENSON'S WORK

Garageband – or you could put in the time and effort to animate a character frame-by-frame for a smoother look.

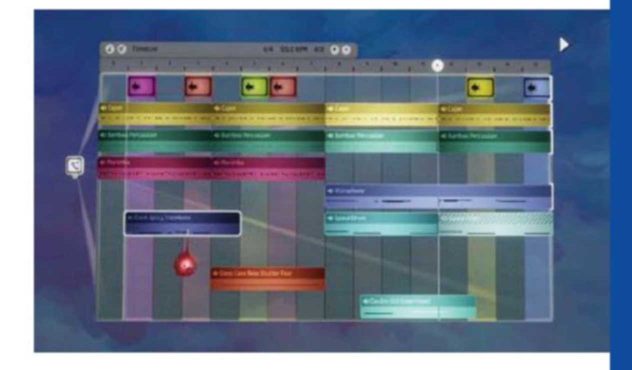
You'll likely start by creating a single scene or level: a 3D painting, perhaps, or something like the tragicomic Please Hug Me, a 30-second vignette we're shown. Created by a Media Molecule staffer, it sees you control a cube seeking an embrace which, finding none from the cone-people retreating in fear over the level's edge, has little choice but to jump into the void itself. But *Dreams* is also capable of more complex designs. Customisable level and progression structures – styled as Maps – let you chain together levels into hours-long campaigns. Each level must have an entrance and exit, and appears as a bubble in a game overview screen; link certain entrances and exits together, and you've got a running order for your game. Draw more than one line out of a single exit, and you can introduce an element of randomness. You can even ensure items and health, for example, carry over between levels, something that wasn't possible in *LittleBigPlanet*'s Create mode (although a resourceful community figured out a way to use the score as a means of encoding data).

There are limits, admittedly, including on the number of objects in a scene. But Media Molecule is already gaming its own systems. Paint some water through a door to a level's exit, then delete the door, and suddenly you're in a new dream. Brilliantly, *Dreams* doesn't save what's *in* a scene: instead, using an in-engine record of *how* every single element has been ▶

PERIPHERAL VISION

***Dreams* will inevitably spill out from the confines that have been set for it. Healey and the team were adamant that everything could be done in *Dreams* using just a DualShock and one's imagination, so as not to alienate players who worry that they haven't got all the gear. But it is also compatible with PlayStation Move, of which Ettouney is an avid fan. "I *am* the Move," he says. "To just change gear like *that*, fast, this is really the credit of the input device. It just makes you *try*." PSVR is already functional, although it won't be a day-one feature – and the same goes for 3D printer support. And while Media Molecule is determined not to offer alternative input devices as a crutch for music creation, there is already MIDI support via Open Sound Control in *Dreams*. "At the moment it's not planned for release," Evans says, "But if there is interest, I desperately want to release it. It's fucking cool."**





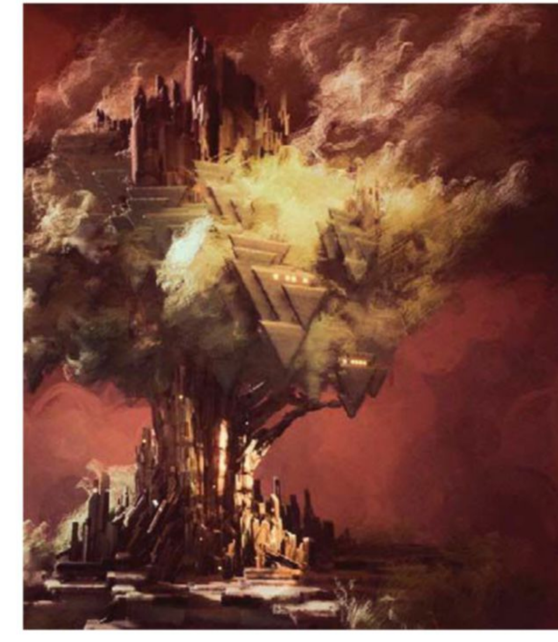


ABOVE **A surprisingly sophisticated music-production interface lets players score their work. Lines of light are motion-controlled 'strokes' of melodies: you can also switch to a more traditional note-input view**

made, it can recreate a level ahead of time. "You could make a world that feels infinitely large if you use the right tricks," Healey says.

While each individual component is remarkable on its own terms, it's the all-in-one nature of *Dreams* that is most astonishing; the way it allows you to hop between, and command in style, every aspect of developing a game. This graceful synthesis has been a nightmare to achieve, Reddy says. "The QA challenge, the production challenge, the coding challenge: every department has been pushed beyond their comfort zone. *Way* beyond." Evans adds, "The sad part of the story is, it's been a very gradual transition from our dream of *Dreams*, six years ago, when we said these words that we're saying today – 'We're going to make this sketching package that lets anyone create anything' – and everyone was like, 'Fuck off, you're insane'. If you'd come in here three or four months ago, people were in the state of thinking, 'Wow, it *could* be so amazing, but it's really annoying that there's this one thing…'

Only recently has everything really come together. "The cloud-watching thing of, oh, now I can do a half-pipe, now I can do a skateboarder – those ideas only come true when you can jump between and combine a half-pipe, a character with a skateboard, and physics, and other elements," Evans says. "If someone were to write a laundry list of *Dreams*' features, they'd miss the fact that the magic happens when that laundry list kind of cross-pollinates. Yes, it's Tilt Brush; yes, it's Medium; yes, it's Unity; yes, it's Blender; yes, it's Photoshop. But the magic happens when you look at it all together.





"*Dreams* wasn't a feature list," he stresses. "It was a dream journal. It was a jealousy I have of Kareem's pencil. It was that philosophical idea of, what if we handed people this deep sketching mentality across the whole of media?"

Despite its remarkable capabilities, however, *Dreams* isn't out to trample all over the gamedev scene as we know it – merely to add a few extra colours to the artist's palette, and so attract new kinds of creators. Whether the thumbsticks and motion controls of *Dreams* will ever bring forth the kind of high-gloss precision that modern players expect remains to be seen (someone, somewhere, with a bootleg mouse-and-keyboard convertor and too much free time will eventually pull it off). But it's that instantly accessible, impressionistic, slightly shonky spirit which makes *Dreams*, well, *Dreams*.

It's more instrument than engine; the team compares *Dreams* to the pencil or the piano. "Technology and digital stuff gets very dated very fast, because it's led by tech," Ettouney says. "What makes something live for longer – the piano's been with us for 500 years – is when it's not only a testament of its technology, but has another level of alchemy to it. *Dreams*, I think, has some of that, where hardware, software and human beings work in a special way." Technical director **David Smith** extols the virtues of Henson-esque "wobbly stuff" during his animation demo, flirtily fluttering the eyelashes of Lacewing the dragon for our amusement. "It doesn't feel like it went through an army of animators and algorithms. You feel that someone made that; you can feel a connection with the person that made it."

Connections, and people, are at the heart of *Dreams*. Media Molecule knows a little something about building and maintaining a live creative community, and *Dreams*' infrastructure for sharing and collaborating has been meticulously thought-out. Creators can upload individual pieces of content they've created – a sculpture of a tree, a fusion-jazz composition, the sound of two saucepans bashing together, a programmed set of AI

CREATORS CAN UPLOAD THEIR CONTENT FOR ANYBODY'S USE AND EDITING PLEASURE

behaviours – for anybody's use and editing pleasure. There's an XP system to help would-be collaborators meet: *Dreams* tracks your in-game activities, and then composes a public profile from those stats. Others can then judge whether you're the sculptor, audio expert, animator, player or curator – a tastemaker who seeks out the very best and sorts it into searchable groups, such as 'The Ultimate RPG Kit' – that they're looking for.

Community challenges, meanwhile, are yet another way to make the vastness of *Dreams* more digestible. "Obviously jam culture is massive, and awesome," Reddy says. "We sort of knew that intellectually, but we didn't know it until we started running weekly jams in the studio. We realised it *had* to be in the game." Each week, a theme will be announced, and the jam is on, with all entries viewable or playable and the winner decided by popular vote. A little focus and competition will doubtless do wonders for intimidated newcomers. "It wipes away the blank sheet of paper better than anything else," Reddy says.

And while the weekly challenges offer one way to get inspired by others' creations, Media Molecule has ensured that *Dreams*' selection will be more rich and varied in nature than in *LittleBigPlanet*. "Everyone's experience of the community was more or less uniform," Evans says. "But *Dreams* is so much more than that." Follow particular creators, and the dreams you'll be nudged towards will be tailored to your specific interests. Choose to go dream-surfing via 'Auto-surf', however, and *Dreams* will feed you a carefully curated stream, plucking levels out of random users' game maps and weaving them together in a chronological pattern. ▶



ABOVE **Concept art was created both in-engine, and in analogue form at Ettouney's in-house art studio. "There is nothing like oil paints – but I cannot achieve the things I achieve in *Dreams* as quickly with them," Ettouney admits**







Dreams' creative range is astonishing, and it's possible to make any style of game in minutes, whether it's a marble run, a city sim, or a rhythm-action minigame within another game. Ettouney hopes this may encourage jaded gamedevs to experiment more: "Some of them forget they used to be a kid who just drew things. We're giving people back some of their time – to just try a river here, rather than taking five days to make it"



"It's just enough randomness and just enough order," Evans says. "You have a sense of progression, but you're channel-surfing between three different stories." Evans recalls PlayStation boss Shuhei Yoshida playing an auto-surf demo that was an ideal proof of concept: "There was a jungle map, and it juxtaposed it with this stupid I Ching advice-line thing," he says. "This skull would pop up and go, 'Did you know that the truth of life is death?' – and then it would be like, back to the jungle. It was just like, 'What the fuck?' It was like David Lynch."

Fever dreams and nightmares, then, are just as viable in *Dreams* as 3D platformers starring fluffy pink teddy bears. Create mode will be fully compatible with VR (not at launch, we're told, but at some point in the future) and other people's virtual-reality dreams will be playable. As with any online creation tool, moderation is a challenge – and *Dreams* is unprecedented, as a creation game, in its potential for graphic violence and sexual content. Media Molecule is ready to react if necessary. "With the things that can go wrong, PlayStation has something that can we can rest upon to begin with, and then watch what happens," Reddy says. "We've got all sorts of ideas about what we can do with age ratings and what we will do with all of these different ideas, but we're lucky to have a base."

Algorithmic curation will go some of the way towards keeping players from things deemed unsuitable for them, although Sony's moderation tools and a willing community will be key. Copyright, too, will be fiercely protected. Should you decide – god forbid – to splice some godawful pop number into your creation without the explicit permission of the licence holder, you should expect it to be swiftly sniffed out and removed. "And you could lose privileges," Healey says. "This is not something that's set in stone, but we could take away your ability to import music."

There is a lot that can go wrong, but Media Molecule is better placed than ever to correct it. "This time around, ten years after *LittleBigPlanet*, how quickly we can react to the community is completely different," Reddy says. "Somebody could do something that's completely disruptive, and it's pretty easy for us to get back in and do something [about it]." It is a gamble, and it is work, but it is worth it, Evans says. "We're betting that *Dreams* will lead to some wonderful things, some mad things, and then occasionally some bad things. But if we didn't take that bet, I guess the alternative would be that we don't make *Dreams*."

DREAMS DOESN'T HAVE TO BE A STEPPING STONE TO ANYTHING TO BE WORTHWHILE

Where *Dreams* feels like less of a gamble, however, is its timing. Just as *LittleBigPlanet* emerged in an era where players were becoming used to the idea of playing and sharing online, so Media Molecule's new game, if you can call it that, feels thoroughly of the moment in an era where the old 'Play, create, share' tagline is less a mission statement, and more a way of everyday life. "*Dreams* is being released into a world where gamers get it already," Evans says. "They get the idea that they can express themselves through Twitch or YouTube, and share. We don't have to do the legwork in explaining that it's okay to just make a silly little thing that makes your statement today, on Tuesday or whatever."

Perhaps most importantly of all, *Dreams* doesn't have to be a stepping-stone towards anything in particular to be worthwhile. Even if you don't choose to share your work, Media Molecule wants players to see that what they make has inherent value. Really, that's the whole point of *Dreams*: to ▶

reignite a passion for creativity as play. "We were looking, actually, at how people played *LittleBigPlanet* Create," says Evans. "And it was like an iceberg. There were people who had their idea, and then they polished it and then they published it.

"But actually, a lot of people said they would go into Create mode, and muck around like in a sandbox, and have a lot of fun – and they would never publish, they just quit. They'd had a whole afternoon's worth of just pissing about, making some gigantic robots and a pink elephant that explodes, and then put some silly music on it – and then they switch off the PS4, and they're done. There's this under-the-iceberg creativity that's going on that's never seen by anyone else. It's not sad, it's creating for yourself." In a world so hyper-focused on productivity, on getting constant feedback from what you've made, Media Molecule's prioritisation of creation without agenda – of doodling because doodling is *fun* – feels weirdly radical. "I think it sort of challenges the notion of: how do we all spend our time?" Reddy says. "And when we're on our PlayStation, what is play? And for us, this is play."

Not everyone will get that concept. Healey recalls showing *Dreams* to a German journalist, for instance. "He said, 'Why would anyone bother making anything? What's the point?' What he was getting at, I think, was, 'If I'm going to put time into this, what's in it for me?'" Healey pointed out *Dreams*' obvious value to budding game developers – little wonder, given that many current Media Molecule staffers got started making *LittleBigPlanet* levels on their sofas. Reddy's philosophy on the matter, however, hints at *Dreams*' true purpose. "It's like, why do anything? In the world of games, this is the thing I've been finding really interesting: what do

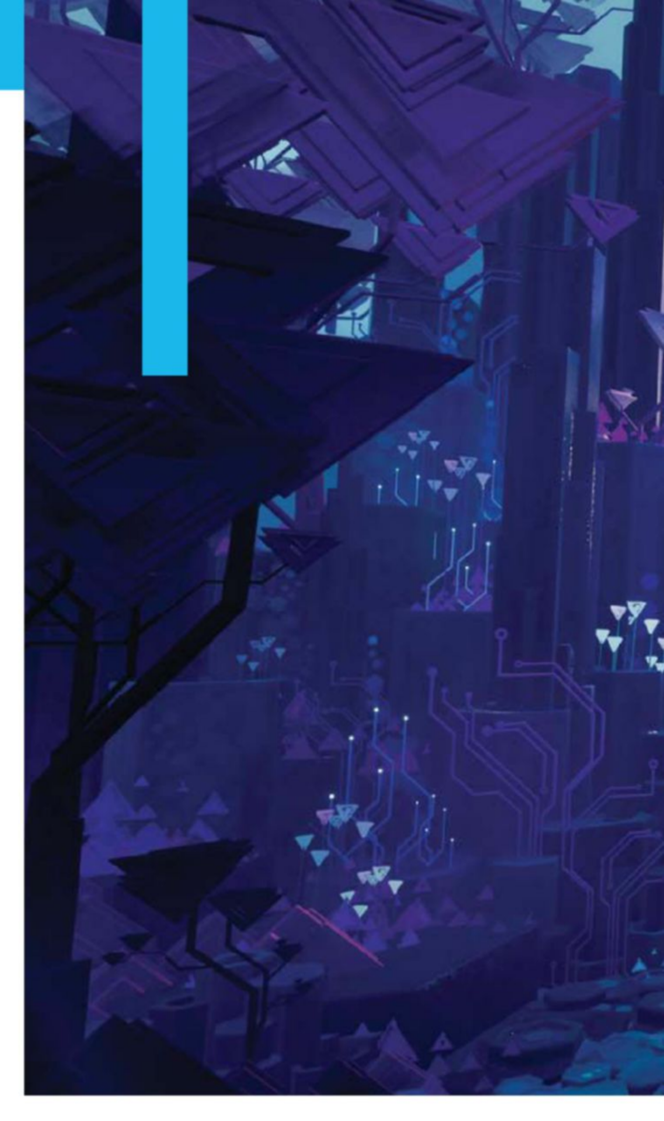
DREAMS POLITELY SUGGESTS THAT WE'VE FORGOTTEN ABOUT THE JOY OF CREATING

I spend my time doing on my PlayStation at the moment? I've got lots of choices: I can watch things, I have loads of different games… [but] we've become so narrow in what we think entertainment is."

In that sense, *Dreams* politely suggests that perhaps we are so used to consuming that we've forgotten about the joy of creating. The real challenge will be packaging that message for a large audience. "I think everyone has an in-road to that creativity," Smith says. "If you say, 'Do you want to create something?', then that's a terrifying and scary prospect. But I think if you give them a game and then say, 'What would make this better?', most people would, quite quickly, say, '*This* would make it better.' If they can just do that, go fix it to be 'better' and try something else, that's the way in."

Dreams is so abstract a concept that it defies the kind of easy categorisation that might propel it to blockbuster success. But the team's anxiety about communicating what *Dreams* actually *is* has lessened over the course of years of development. Even though they're still struggling to cram it into a neat explanation, *they* know what it is – for now, at least – and are visibly more relaxed as they gear up for the release of their beta, and then the game's launch later this year, confident players will understand it too.

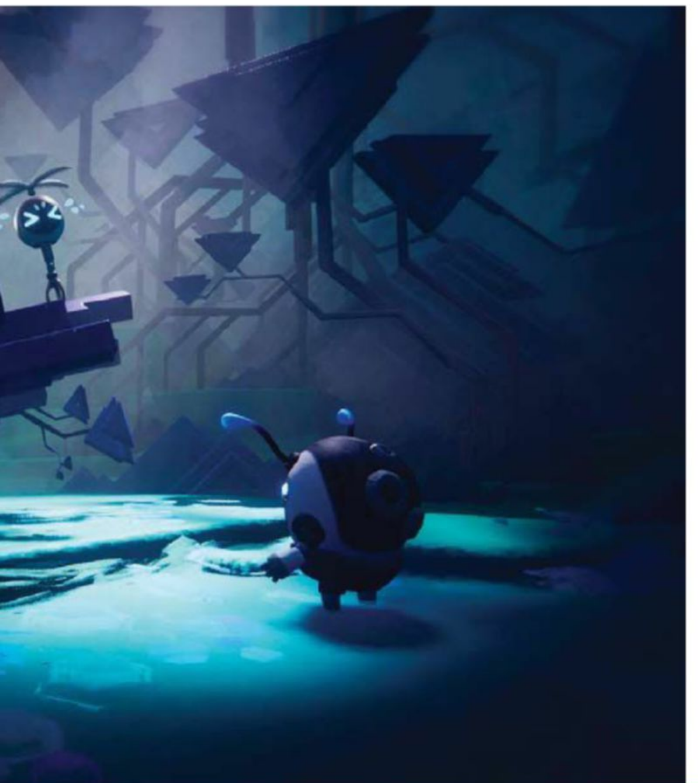
"I do think it's going to fundamentally open up gamedev, and art, and sculpture to people who have no interest in it," Evans says. "They play *Dreams*, and it's a total fucking Trojan Horse and I love it. I'm never going to say 'Discover sculpture' on the box. You turn the box over and it's, 'Come play this hilarious PlayStation game involving Frances The Hammer, Foxy The Great and Art's Dream". Fast-forward two weeks, and they're like, 'Look at my sculpture! It's fucking amazing!" And what an amazing journey to be able to send people on." ■

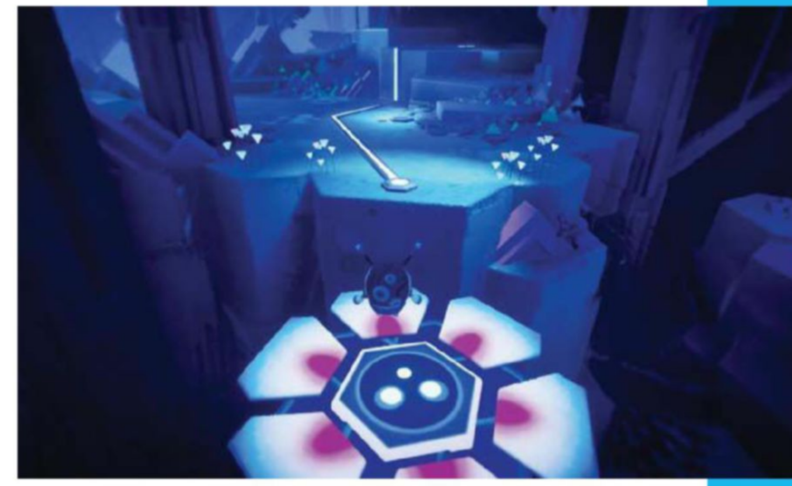




FINE EXPORTS

It's been hinted at before, and Media Molecule is reluctant to go into the particulars, but if you make your masterpiece in *Dreams* and decide you'd quite like to sell it, there's a chance you might be able to in future. "What I will say is that technically, the whole thing has been constructed in a way that things can be exported," Healey says. "Potentially, in future, some people could use this to make a PSN game, for example. That's not something we're really talking about at the beginning – but it's one of the long-term goals, in my mind. The problem that arises is making sure that everybody that actually contributed to the game you've made gets credited properly, so there are some sticky areas to tackle there." Hopefully, *Dreams*' in-built genealogy system, which tags creations with PSN IDs, will go some way to addressing the issue – although we imagine the game's EULA will be a beauty nonetheless.





ABOVE **Every pixel of Debug's sci-fi surroundings were created in *Dreams*. Media Molecule isn't allowing players to import textures either, to preserve the game's overall thumbprint, Healey says: "We might cave into pressure in the future, who knows – but it's been a very deliberate choice"**


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AN AUDIENCE WITH…

YOSUKE MATSUDA

The president of Square Enix on Marvel, VR, and Final Fantasy's latest rebirth

By Edwin Evans-Thirlwell



CV

Matsuda joined Square Enix Holdings in 2001 as a senior vice president, rising to Square Enix company director and chief financial officer in 2004. He was appointed company president and chief operating officer following the resignation of Yoichi Wada as part of a costly, company-wide restructure in 2013. Seeking to shore up revenues outside Japan, he has decentralised the company's project approval process – a significant change of approach given the very hierarchical nature of Japanese corporate culture in general – and put the emphasis on mobile and games-as-services. His efforts have helped bring about a 20 per cent revenue jump for the fiscal year ending March 2017, despite the loss generated by Square Enix cutting ties with *Hitman* developer IO Interactive.

With the ever-changing *Final Fantasy* as its flagship series, Square Enix is a publisher characterised by rebirth, and the half-decade since the resignation of long-serving CEO Yoichi Wada has certainly been tumultuous. *Final Fantasy XIV* and *XV* have returned from death's door. The elderly *Tomb Raider* series has been reinvented as a credible *Uncharted* killer. *Nier: Automata*, the troubled sequel to an obscure cult hit, has become a surprise mainstream success. *Hitman* has been resurrected as an acclaimed episodic simulation – and dramatically sold off to reallocate resources. Square Enix has a broad portfolio, extending from the throwback JRPGs created by Tokyo RPG Factory to unconventional European hits such as Dontnod's *Life Is Strange*, and according to president and CEO **Yosuke Matsuda**, that breadth is vital, even when it creates inefficiency. We sat down with him to discuss the publisher's many recent acts of reinvention and what the future holds for its best-known licences.

You've spoken of the importance of rediscovering Square Enix's Japanese roleplaying roots. What does the JRPG represent for you today, as a collection of concepts and in terms of its player community?
As long as it's a roleplaying game made by a Japanese development team, it's OK to call that a JRPG, I guess, as long as it's a good, interesting game! I think what the teams that make these games think is probably slightly beside the point – the public opinion of these games is more important, and I think a lot of people still consider Japanese RPGs to be turn-based. I don't think the idea of a turn-based game is out-of-date or old-fashioned at all – it's just one style of game that you can make, and as long as there are teams out there in Japan that want to continue making them, they absolutely should. Games like *I Am Setsuna* and *Lost Sphear* fit into that category and outside of that, *Persona* has done well recently. With Tokyo RPG Factory's games, I think the way you look at it is that obviously you need to have respect for these older games, but what's really important is that you're creating games for now. It's within that style, that turn-based framework, but they're looking to make a game for modern audiences.

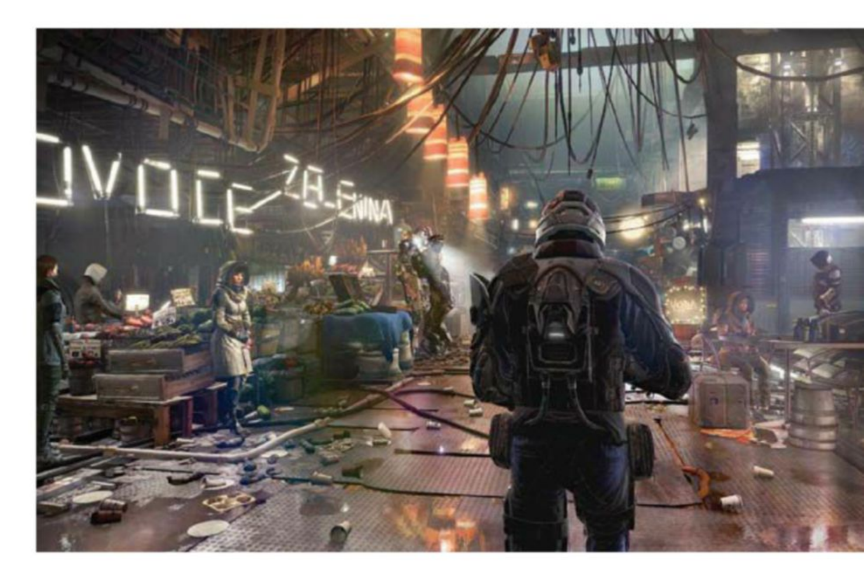
Will Tokyo RPG Factory ever work directly on an old Square Enix property, such as *Chrono Trigger*?
The policy for them is to have them focus on new IPs, new titles, and I don't think that policy is going to change in the near future. We have a lot of old IPs and games that we made back in the Super Nintendo days that we may revisit some time, but they won't be given to Tokyo RPG Factory. They're very much focused on creating new games. On the other side, those old IPs and games we might want to go back to – those would be done by the original teams within the main body of Square Enix.

As a platform that is perhaps more about ideas and style than technology, it feels like the Switch is a natural home for Tokyo RPG Factory projects. How have Square Enix games fared to date on Switch, and how will you explore that platform in future?
They haven't done badly! Obviously it only came out last March, so it hasn't been long, but of all the publishers who are working on Switch we've done quite a few things already. It's a very attractive platform – there are a lot of people within the company that are looking to make games for Switch.

You've talked of how important free-to-play and indirect revenue systems are to Square Enix's business. How do you overcome hostility towards strategies such as microtransactions among players?
I think a lot of the time, when people hear the phrase "games as a service", they always focus on the problem of microtransactions – they really close out the meaning to just being that. We look at it in a much broader sense. If you look at the idea of adding things to a game after release to keep it fresh and exciting, to keep people playing over a long time, and all the different ways you can do that, it comes to express a lot more. People are too focused on the problems.

***Final Fantasy XV* has undergone an astonishing rebirth, from vapourware to best-seller. It feels like the concept of a relaxed open world roadtrip has drawn in a lot of players who were deterred in the past – is that a fair assessment?**
Final Fantasy is basically a new game every single time. Every time we set out to make one, the directors of the team really look to see what they can try out, how they can take it beyond the previous one. With *FFXV* they really did try out a lot of new things – the fact that it's become more of an action-RPG, the open world we put in there, the whole structure of the game is different in a lot of ways. The characters themselves are certainly very memorable. I think one of the big things is we really did rebuild it to appeal to another generation of gamers. If you look at the demographics for *XV*, it really brought a lot of younger players in. But the important point, given the tradition of the series, is to do something new and a bit different each time, and that's not just *Final Fantasy XV* – every game in the series has done that till now.

There are teams who would say that reinventing the wheel each time is very inefficient. How do you keep costs down between instalments?



In 2013 Square Enix announced the Deus Ex Universe, a crossmedia enterprise unified by the story of a global conspiracy. Following *Mankind Divided*, this idea appears to have now been shelved

"WE HAVE TO KEEP FINAL FANTASY FRESH AND KEEP PROVIDING THOSE SURPRISES FOR FANS, IN ORDER TO PRESERVE ITS VALUE"

You do have to think about efficiency, that's undeniable, but because *Final Fantasy* is our flagship series, in some ways it has to be done that way, with all the stops pulled out. When you get into the nitty-gritty of how development processes are handled for each title, there are lots of small things you can do to maintain cost-efficiency. But in future, we have to keep *Final Fantasy* fresh, and keep providing those surprises for the fans in order to preserve its value.

Similarly, *Final Fantasy XIV* has come back from the brink – you even created an in-game apocalypse to prepare the ground for the Realm Reborn overhaul. What kind of lifespan do you see for it at this stage, and is it a question of attracting players now or keeping the existing playerbase happy?

We want it to go on for as long as it can! If you look at the numbers for MMOs, usually you start out with a massive audience and then it slowly decreases, and when you get updates and expansion packs it shoots up and then slowly goes down again. With *XIV* it keeps going up. With the release of Stormblood, the first expansion, it actually went above what we had at the start – it was a very surprising figure. So it's very highly regarded as a game – we have old players coming back because of those upgrades and additions while bringing in new players.

It's certainly unusual to see a big subscription-based MMO pulling in that kind of growth. Do you foresee any changes to the game's revenue model in a few years' time, like a change to free-to-play?

We're not thinking about that. We want to do it as best we can as a subscription-based MMO.

Square Enix has a large stable of North American and European subsidiaries and properties. What's the secret to managing these teams in different regions? How much independence do you give them?

We do keep an eye on them. Each studio has a head who reports back to me in Tokyo, and our CEO over here, Phil Rogers, he keeps in close contact with these guys. We report back to each other generally once a week, or at minimum once a month, and obviously nowadays with video conferencing it makes life easier. We stay in the loop, they show us the production and we keep an eye on it that way. Just today, while here in London, I went to the demo room and saw some work-in-progress builds – we do that a lot. We're very open with our communication.

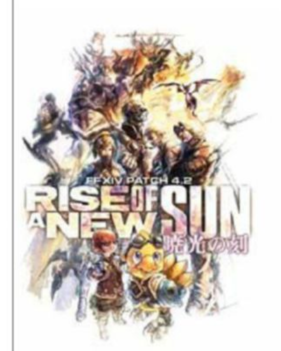
In particular, what does the future hold for the Deus Ex Universe? Do you still see it as an enormous cross-media enterprise, following lower-than-desired sales of *Deus Ex: Mankind Divided*?

It's a very important franchise to us, yes. There are a lot of weird rumours going around online about how we think about it, but I don't think anybody in the company has said any of those things, really. We're definitely looking into all kinds of different avenues for what we can do with the next *Deus Ex*. As this is more of an internal development and we don't have unlimited resources and staffing to put into those projects, there's a puzzle we have to solve. Obviously that's something we have to think about with all of our projects. But yes, *Deus Ex* is a very important franchise and we very much feel we have to go ahead and expand on it in future.

It feels like a natural fit for Square Enix, as a roleplaying series with a storied, non-linear world and very ornate art direction.

What makes it unique and such a great franchise in addition to those points is the fact that it is a firstperson game – that's unusual for us – and the way the world is constructed. It's not just a flat plane you cart around; it has that verticality to it, that involved structure. I think we're going to make a lot more use of that in future, really try to work with that.

Your partnership with Marvel also makes a lot of sense, given your success at working with Disney's properties in *Kingdom Hearts* and your manga-publishing business. How did that come about, and why is it a good move for Square Enix right now?



Once something of a laughing stock, *Final Fantasy XIV* is going from strength to strength. It will receive another update shortly



We're very open in our stance about partnerships. We're always interested in valuable partnerships with good companies. We have been working with Disney on *Kingdom Hearts* for a long time, as you know, but the discussions with Marvel really took place separately to that – they took an interest in us as a great developer, and approached us to ask if we could make a game, and we said we'd welcome the chance to put together something around that. Obviously we're going to put out new information about this project in the future, so please keep your eyes peeled.

You recently closed your cloud-based gaming service Shinra Technologies due to a lack of external funding, but we understand you still see a lot of potential in the concept. What role will the cloud play in Square Enix projects in future?
Shinra was a company that was focused around the idea of creating a gaming platform, and that somehow didn't fit with what we do as a gaming publisher, producer and developer, so there was a mismatch there, and obviously, it influenced the finance and we couldn't get the funding in the end – that's why the company had to be closed down. But certainly, cloud gaming is continuing to develop, and I think you'll definitely see a number of cloud platforms in the future, so we have to keep looking at it. Cloud gaming as a business is very capital intensive – you need that money to back it up or it becomes a very difficult thing to do. Certainly there will be a number of big players who are looking into this sector in future, and there are maybe things we could do with them.

Have you considered creating a unified development platform, similar to what EA has done with Frostbite?
We have been thinking about it. The downside of that is that if we had one unified development platform, it would make it a lot harder to express the different characters, the different proclivities of our titles – we make a very broad range of games, and it might affect the variation we can get in there. I think a much better way of improving the efficiency of our development that is more fitting to the way we work is, rather than unifying everything on the same platform, to take all the different approaches the individual studios use and are very familiar with, and have them exchange information about the tools and methods they use. In that process of unification, consolidation there is obviously the trade-off in terms of individuality, and I would rather value that than the efficiency gains to be had from consolidation.

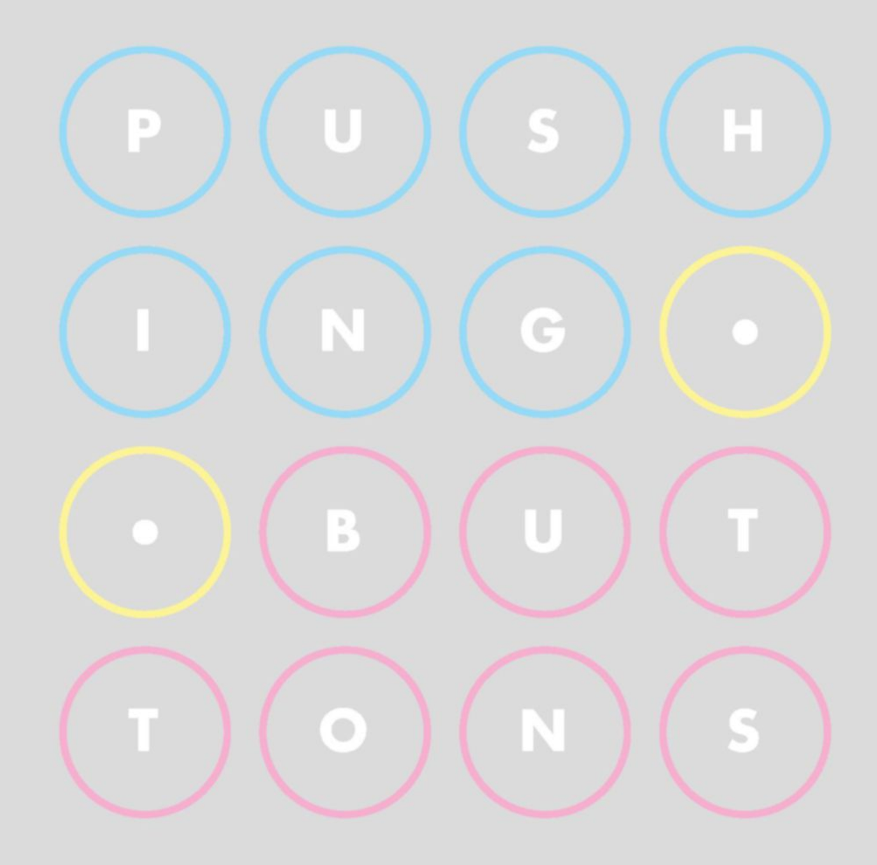
You've said that VR needs to be more widely accepted before it can take off as a gaming platform. What's your view of the VR industry and market right now?
I think it's very interesting at the moment, it has a lot of potential, but it's still too expensive – the investment consumers have to put into the hardware is just too high right now. I think there will be a lowering of the price and wider acceptance in future, but the other point is the wearability of the equipment – it's still very bulky, it gets in the way. I think if you look at it objectively, rather than going for something that you put on, like a headset, to create that kind of environment around someone that you don't have to wear anything for, that is indistinguishable from real life – that would be a more exciting way of creating a VR environment, but it'd obviously cost much more, too. The other thing I'm interested in right now is augmented reality on mobile. We'd like to make quite a few different kinds of games involving that kind of tech.

"VIRTUAL REALITY IS VERY INTERESTING AT THE MOMENT, IT HAS A LOT OF POTENTIAL, BUT IT'S STILL TOO EXPENSIVE"

There has been a lot of discussion in the industry recently about institutional sexism and a toxic culture of overwork. Is there anything Square Enix could do to improve, on this front?
Certainly. Square Enix recently got a lot more female development talent working for the company, and I think that's very important in terms of broadening the creative base. We want to make a wide variety of different games for different people, and in order to do that the development side has to represent that – you need a lot of people from different backgrounds who work in different ways. So because of that, at Square Enix as a company we absolutely do not differentiate between male and female employees. Everybody is treated flatly and exactly the same – within our company, we very much strive towards that, because from our point of view it will make it a much better business and give our games that variety they need. And then as regards your second point about overwork, it's the same thing really. There's a big discussion in Japan right now about work-life balance and reducing overtime, things like that, so it's certainly being looked at from several angles. But in the same way, as a game company we want people to be at their best when they make their games, to try their hardest and put their best in when they're working, but also to be able to take time off and recharge. We do see that we have to create an environment where you have that work-life balance and people can take time off when they need it. ■



Blurring Disney's stable of characters with *FF*, *Kingdom Hearts* is bizarre but compelling. The next instalment features attacks based on Disney resort rides



Inside the minds of the control freaks breaking the rules of how we play games

By Jen Simpkins

There's a universally popular appeal to somebody playing a videogame with an improbable device. It could be running *Dark Souls* with the *Donkey Konga* bongos, using a MIDI keyboard to grind XP in *World Of Warcraft* or piloting an interactive cardboard box by pressing hand-drawn buttons in *Space Box* — it is all but guaranteed to spawn news articles, clicks and views galore.

It's a watchable phenomenon, as Twitch streamers everywhere will attest, with curious viewers waiting to see whether their champion can really win a round of team deathmatch using only voice commands. It takes a certain kind of person to think beyond the standard input devices, and an even more determined one to engineer the feat. The question is — given the time, expense and technical frustrations — why they feel compelled to do it at all.

Some have no choice but to adapt: born with a condition that affects his muscle growth, Mike 'BrolyLegs' Begum learned to play *Street Fighter* at a competitive level by using his mouth and face to manipulate a gamepad. Others feel compelled to push themselves beyond the limits of regular controllers not out of necessity, but out of a deep fascination with how we interface with games.

For some, using the 'wrong' controller sits somewhere between showing off and testing themselves, becoming equally addicted to the game and the bizarre input method they've chosen to use. What starts as a challenge or simple curiosity can often transform into something deeper: a belief that a different kind of controller can change the way we think and feel about what's on a screen. Then there are the artists who've discovered the value in forgoing the very notion of a display, who've whittled down a game to the unique dynamic created between controller and player.

Our conversations with some of the industry's most inventive controller enthusiasts turns the spotlight on individuals who have made a niche interest their livelihood, who revel in subverting expectations, and who know there's an irresistible new aspect of videogames to be explored. Why do they do it? Well, why does anyone do it? Because pushing buttons makes things happen. Pushing buttons feels *good*. ▶

Twitch streamer **Dylan Beck**, better known by his online handle Rudeism, delights in playing well-known games the wrong way. *Dark Souls III* on a dance mat, *Rocket League* with a *Guitar Hero* controller, *Overwatch* using flight sticks – you name it, he's probably tried it. His antics regularly attract thousands of viewers: the prospect of seeing somebody tapdance Iudex Gundyr into submission is an intriguing, irresistible one, and Beck is happy to oblige his audience. His appetite for controller-based challenges has continued to grow, and when he learned of the Makey Makey, a USB-based apparatus that can send keyboard and mouse signals to a computer via almost any input device imaginable, he realised it was time for something new.

It started with bananas – 15 of them, purchased at Beck's local supermarket. The idea was to create a thematically appropriate controller to play as Winston, *Overwatch*'s gorilla scientist, for one of his streams. "I wired up each of them," Beck says. "It was pretty simple in terms of planning and execution: each banana sends either one button press or one mouse movement. WASD takes four bananas, each mouse direction needs one banana, and so on." With an earthing cable clipped to his person, touching each piece of fruit conducted an electric charge that allowed him to control the game, with bananas programmed to jump, shoot and activate Winston's shield and Ultimate.

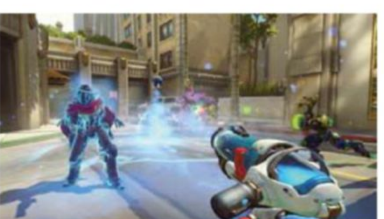
Viewers ate up the novelty, and it attracted attention from several gaming-news sites. Beck was pleased with the resulting controller and the widespread reaction it prompted. The *Overwatch* experiments continued: using a baguette to work Widowmaker's sniper rifle; playing Symmetra via a microwave; and drinking from teacups to control Ana. Creating his own unusual controllers became a new source of entertainment outside of playing games, and he began to document and explain the process behind making each one. "I find tinkering away to be a really relaxing kind of fun," Beck says.



When not creating controllers, Dylan 'Rudeism' Beck makes mobile games at New Zealand studio Runaway

CREATING HIS OWN UNUSUAL CONTROLLERS BECAME A NEW SOURCE OF ENTERTAINMENT





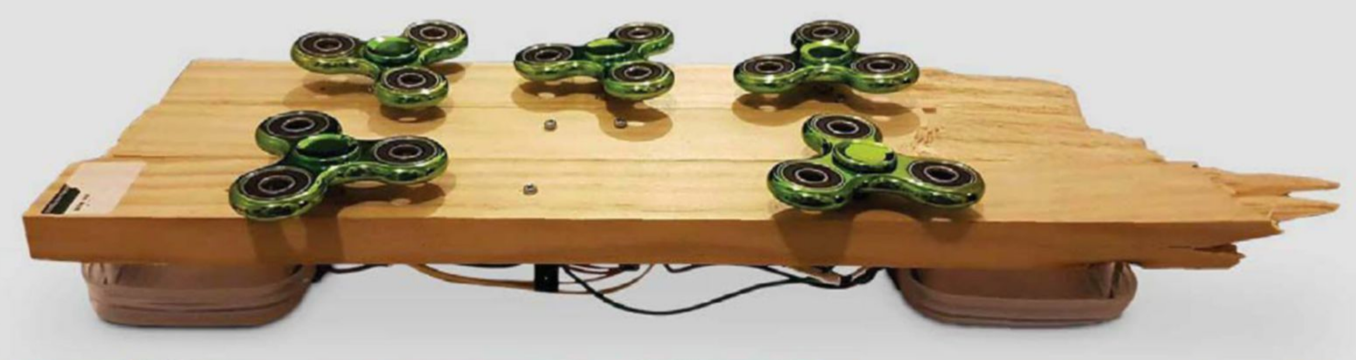
Beck builds most of his controllers to play *Overwatch*, but says that his *PUBG* frying pan (which allows for both shooting and melee attacks) is his favourite

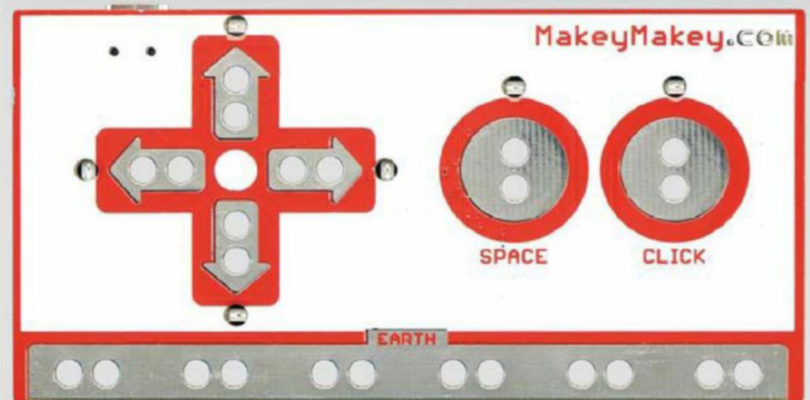
"I know what I need to do, there's no rush to do it, and if I'm streaming my build, it's an opportunity to have a good conversation with my chat." Talking to his viewers while actually *playing* something like *Playerunknown's Battlegrounds* with a wired-up frying pan, meanwhile, is more of a struggle: "It can be a little hard to form sentences when you're using some weird contraption to play at the same time."

His viewers are not always there for the commentary, and his performance leaves something to be desired when he's playing with, say, two tennis balls and a balance board. Ultimately, people flock to Beck's streams to see the inadvisable made briefly, hilariously viable through nothing more than a few wires and some determination. "Whenever I do something remotely skilful, it's always a huge deal," Beck says. "Chat gets really into it if I get even a single kill."

There's something grimly fascinating about seeing someone spend six hours gluing wires to a broomstick to perform an in-game task normally accomplished by holding left click. It's Beck versus the improbable, and although his creations often fail, the satisfaction when a controller works as imagined makes victory all the sweeter. A previously world-class *Guitar Hero* player, it's perhaps unsurprising that Beck's controller-crafting motivations stem from a deeply ingrained competitive spirit. "At first, it was the challenge of competing against players who are using the 'correct' control schemes that pulled me in," he says. "I wanted to prove that any game can be playable in any way you can think of, and I still believe that – but I think my reasons for doing this have definitely grown a lot.

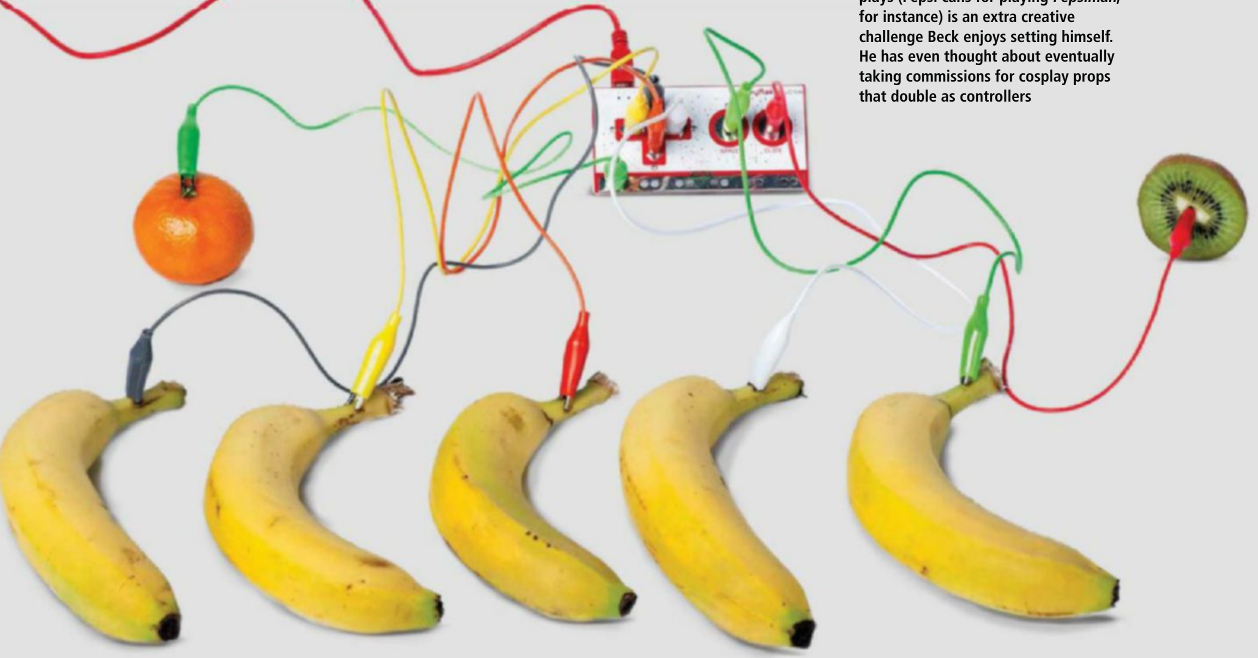
"I really enjoy building more and more complex controllers, because it's fun to use over-the-top contraptions, but also because it's a great challenge just to build these things. I never saw myself as a hardware engineer of any variety, but it's really addictive work."



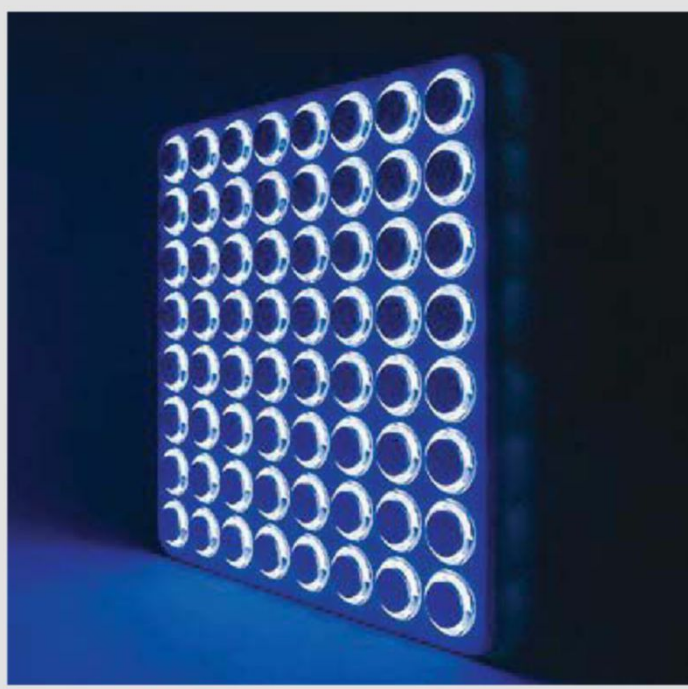


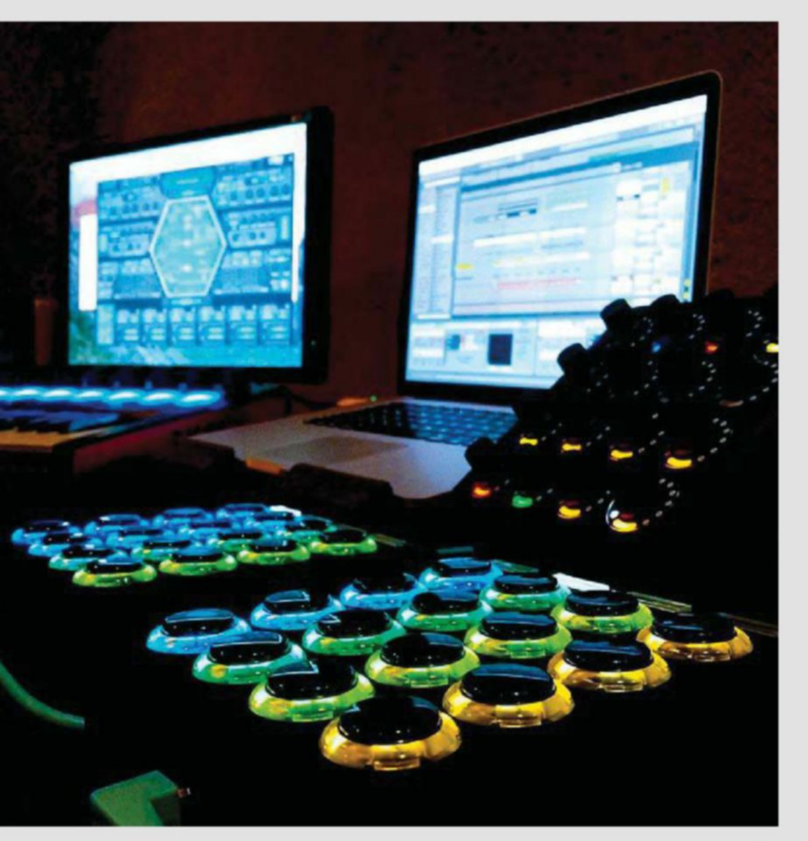


With the help of the accessible Makey Makey invention kit, Beck can rig up increasingly creative builds. At the top is his latest achievement (or abomination, according to personal taste): a fidget-spinner setup to control *Overwatch*'s cyborg ninja, Genji, the toys recalling the character's shuriken. Explicitly theming controllers to the games he plays (Pepsi cans for playing *Pepsiman*, for instance) is an extra creative challenge Beck enjoys setting himself. He has even thought about eventually taking commissions for cosplay props that double as controllers



DJ TechTools' 64-button MIDI Fighter previously existed as a one-off creation for Shawn Wasabi, but is now generally available. Hughes was sent a prototype, and hopes to make it fully compatible with *Nour*. In a way, things are coming full-circle for Hughes: his father was a jazz musician, and although he never pursued music, growing up around MIDI controllers encouraged him to splice them into the world of visual arts









Similarly, if you had told a young **TJ Hughes** that he would one day build a game to be played with an electronic music controller, he might not have believed you. *Nour* originated from a series of 3D models he'd sculpted in Blender. "I had boba tea, and I loved the drink: the flavour, the aesthetics of it," he says. "So I modelled a little boba tea for fun, and as a sort of artistic challenge. I wanted to see if I could get the shader looking right, the milkiness of it." Following another good meal, a bowl of ramen was his next muse: "I uploaded it to Twitter, and it blew up."

Hughes' appealing pastel creations were stimulating more than just interest. "I'd hear a lot of, 'Oh man, I'm hungry now'," he says. "And that's what interested me. I thought: 'Okay, I can make people feel hungry, convey a flavour with colour and geometry – I wonder how much further I could go with this idea.'" The result was *Nour*, a game that encourages you to play with your food by popping popcorn, swirling boba pearls and twirling noodles. An early demo at a local art event proved successful, but Hughes felt there was still something missing. Then, a friend introduced him to one of Shawn Wasabi's music videos, showing the electronic artist using a MIDI Fighter. "I was so entranced by the controller," Hughes says. "It was exactly what I was looking for: bright, glowing buttons that you can mash. It's so satisfying. That was the perfect experience to line up with the game itself. I was like, 'How can I use this device, even though I'm not a music producer?'"

The MIDI Fighter, designed as a DJ controller, allows the MIDI-mapping of audio samples to its buttons. When pressed, buttons launch audio clips (and programmed 'light shows' via LED rings) in realtime, meaning users can perform stunning live sets. The buttons that give the controller its name are made by the legendary Japanese company Sanwa: the kind found on arcade fighting game cabinets, hard-wearing, offering ultra-low latency and, importantly for Hughes, producing a wonderfully tactile click when pushed.





Hughes hopes to develop a plugin that lets the MIDI Fighter's LEDs respond to changing scenes: "Maybe a flavour of the boba tea would determine their colour"

"IT WAS EXACTLY WHAT I WAS LOOKING FOR: BRIGHT, GLOWING BUTTONS THAT YOU CAN MASH"



TJ Hughes, aka Terrifying Jellyfish, created survival sim *Feesh* and provided technical art for *SmuggleCraft*

While Wasabi favours a custom-made 64-button version, *Nour* uses the 16-button MIDI Fighter 3D, which also contains a motion-tracking sensor. Hughes has incorporated this function into the game. "Making the popcorn scene was the first time that I realised how amazing this controller was: tilting it, and seeing the platform respond," he says. Watching convention-goers feel that same joy of discovery is incredibly rewarding, he says. "People approach, press one button, see something happen and then press another – and then they start going faster and faster, mashing buttons and laughing. It's amazing to see the transition from curiosity to mindless fun."

There is no timer, score or objective in *Nour*: rather, Hughes' goal is to foster experimentation. Players often invent their own tasks: plopping a pair of chopsticks into the ramen using a magnet function on one button, or having toasters pop out slices in perfect synchronicity. Its concept may be simple, but *Nour's* allure is already proven, having raised close to $30,000 on Kickstarter from a thronging crowd of evidently hungry backers.

When *Nour* releases in April, most buyers won't be able to experience the game as fully intended: after all, not everyone has a spare $200 to blow on a specialist music controller for a single game that can just as easily be played on a keyboard. Hughes is programming *Nour* so that players will be able to plug in all manner of MIDI controllers, and hopes for even more creative solutions. It's a bittersweet trade-off: not everybody will be able to experience *Nour* as its creator truly intended, but there's no controller out there more suited to its premise than the MIDI Fighter 3D – and with that knowledge, Hughes must surely be satisfied.

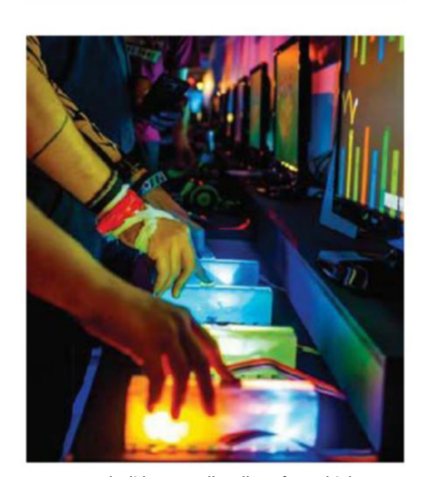
For experimental hardware game developer **Robin Baumgarten**, the controller comes first. He is perhaps best known for *Line Wobbler*, a one-dimensional dungeon crawler communicated by a long strip of LEDs and played with a door-stopper-spring joystick. For Baumgarten, it's mechanics that lead the way: not in a gameplay sense, but in a physical sense. He builds a controller, then designs a game for it. "When I start from scratch, I take a sensor, or an interaction, and I'll try to build something around it, and see if there's an emergent gameplay that comes from this interaction," he says. "For *Line Wobbler*, that worked out super well: when we put together the spring and the LED strip, the game was there."

A sensor attached to the spring measured the joystick's movement back and forth, while a debug output to the LED strip had a little green light wobble in tandem with the spring. "I was like, 'Oh shit, that looks kind of violent,'" Baumgarten says. "So if it looks violent, it might be an attack, and if it's an attack we have enemies." The dungeon-crawling element quickly took shape, Baumgarten working within the limits of a single dimension to add conveyors that push the player along, dangerous lava that requires careful timing to cross and even tricky slopes that can be modelled according to how the LED strip is placed in a real-life environment.

It's not exactly a simple game to explain, or visualise: even videos of *Line Wobbler* aren't particularly useful, its bright LEDs washing out the picture. It has to be played to be understood. "The first big show I took it to was the Alt.Ctrl exhibition at GDC," Baumgarten says. "Tim Schafer was there, and he was my childhood hero – *Monkey Island* was my thing growing up. He really liked it, and said 'Can I buy one?' The fanboy in me was like, 'What?! Tim Schafer wants to buy one, oh my god!' I thought, maybe I really have something here, and I'm going to try to push it as far as I can."


Robin Baumgarten trained in programming, but later revisited his childhood love of woodwork and soldering

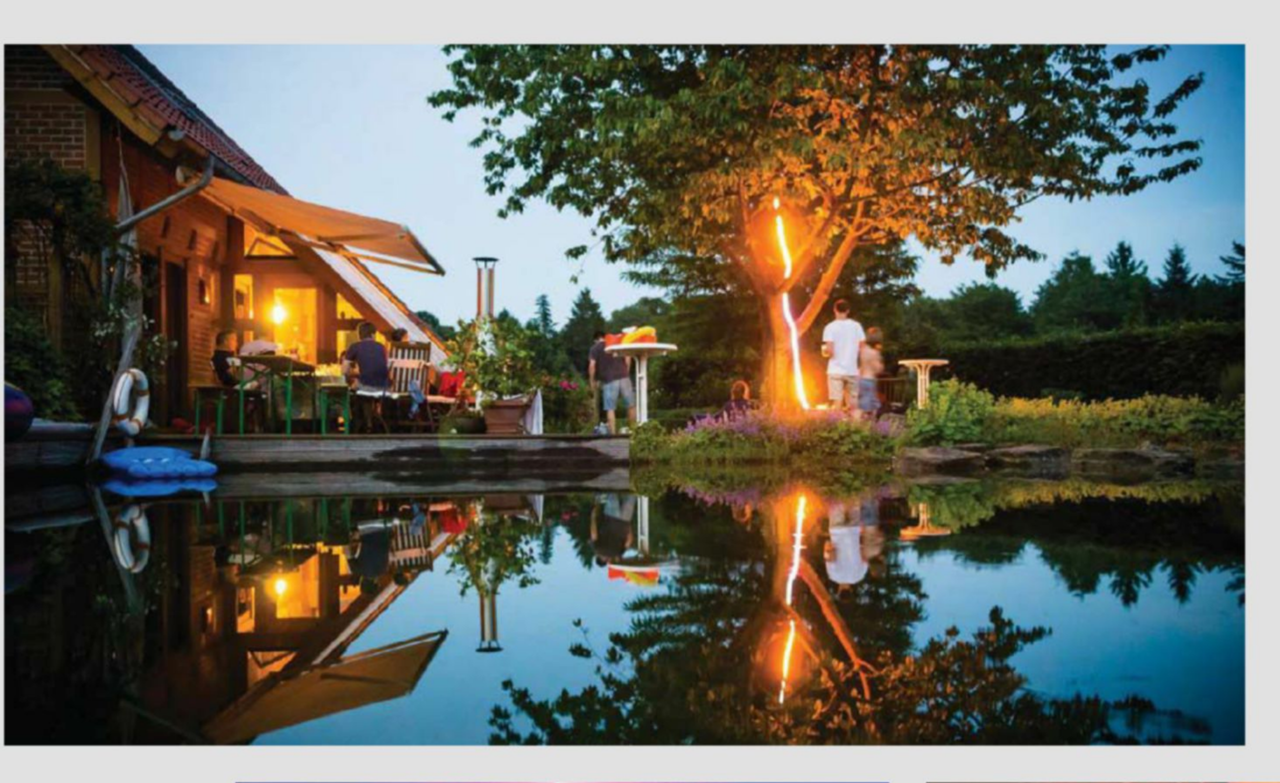
"IF I COULD MAKE MY GAME AVAILABLE TO EVERYONE, I WOULD TOTALLY DO THAT"


Baumgarten's slider controller allows for multiplayer minigames. The faders lend themselves to a variety of mechanics, such as weighing, aiming or balancing

Like most of Baumgarten's creations, *Line Wobbler* is now exhibited in museums, game festivals and other public spaces (most recently, King's Cross station in London) for people to play, with Baumgarten receiving an artist's fee. It's not a big income, but alongside a Patreon that allows fans to support his general tinkerings, he is now able to work on his experimental hardware, and games for it, full-time. "There's certainly a niche for this product to exist, but it's definitely not a mass-market thing," Baumgarten says. "If I made a Kickstarter, I would run into problems. People who haven't seen *Line Wobbler* in person might say, 'It's an LED strip on a spring, how good can it be? How expensive can it be?' I'd have a lot of trouble selling it online, because the price point right now is fairly high."

It takes Baumgarten two days to make each copy of the game. The LED strip alone costs around $150, specially chosen for its high framerate and low latency, which pushes the sale price up to around $1,000. "For museums, on the other hand, that's almost small change," he says. "This exclusivity is a problem in that my game isn't as accessible." Yet that's precisely what makes Baumgarten's one-of-a-kind creations so appealing to museums and festivals looking to offer something unique. "But it's definitely not by design. If I could make my game available to everyone, I would totally do that."

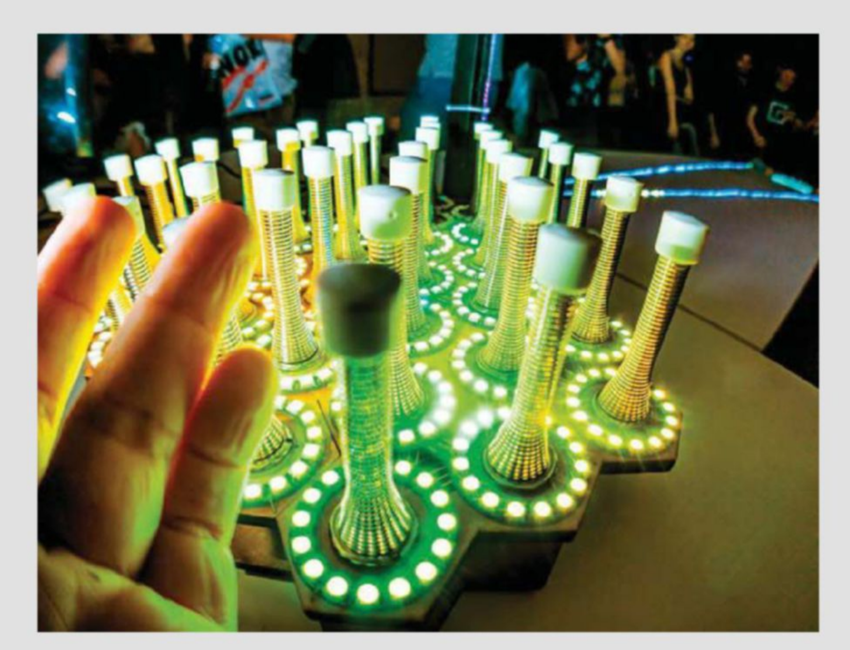
Perhaps the closest Baumgarten has come to designing a mass-market product is his slider controller, the first creation he publicly showed. The idea came from his time working on mobile games. "I wanted to make a game where people used sliders on a touchscreen. Back then, I was just getting into Arduino, with controllers and faders. I thought 'Maybe I can make this in the real world.'" The motorised sliders were fairly cheap, and all Baumgarten had to do was build a container for the mechanism. The difficult part, as always, was finding the right kind of minigames to fit the controller. A reversed *Flappy Bird*-style ▶







The success of *Line Wobbler* is what drove Baumgarten to pursue his hardware experiments as a full-time occupation. Although his work is artistic, he is interested in the overlap between niche and mainstream controllers: "Nintendo has always been on the experimental side. Nobody has ever used this weird infrared camera that they have on the Joy-Cons." His creations aren't build to an industrial standard, but Baumgarten sees potential: "There could be a new-wave arcade scene. Maybe arcades will make a comeback"



Creating *Wobble Garden* was a tricky process: Baumgarten had to contend with both software and hardware bugs. "There's a whole new dimension of problems!" From the outset, however, he built the controller with exhibitions and buyers in mind. "It's a hexagon pattern, so if a museum comes along and says 'We want an entire wall of this', that's no problem, they pay per metre"



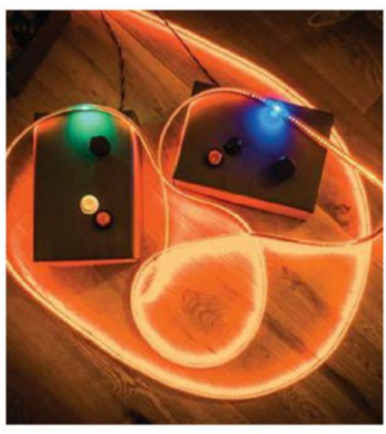
game, where the bird flew automatically and players used the slider to move the gates, worked well as a one-to-one, physical experience. It even looked exciting, thanks to the motorised sliders playing the game automatically whenever they were left untouched.

But the game was neither deep nor fun enough for Baumgarten. "Starting with the mechanic – building a game from the bottom up, basically – is a challenge that doesn't always have a good result," he says. "A few of my controllers have had this issue, where I find a controller, but the application isn't obvious. And then the question is, 'Do I put more time into this trying to find this game? Or do I just make the next thing?'"

It seems Baumgarten is increasingly determined to have both game and controller exist in such perfect symbiosis that the combination becomes something else entirely. His latest piece, *Wobble Garden*, is one such creation. "There's an interesting, fuzzy barrier between what is a controller and what is an alternative-hardware game," Baumgarten says. "*Line Wobbler* definitely fell on the game side, but *Wobble Garden* is a weird overlap between a toy, an interactive art piece and a videogame."

The hardware itself, a grid of 36 sensor-enabled springs and reactive LED lighting hooked up to two tiny Arduino computers, was made over the course of three weeks at the London Hackspace. Baumgarten took the completed controller to his next game jam – Splash Jam, which takes place aboard a cruise ship in Norway. Just as TJ Hughes' public demos have heavily influenced *Nour's* development (seeing people intuitively trying to tilt the controller spurred him on to incorporate the MIDI Fighter 3D's motion-sensitivity as a game feature), Baumgarten's observations of others interacting with *Wobble Garden* informed the type of game he would make for it.

"At Splash Jam, we did a little *Whac-A-Mole* prototype," Baumgarten says. "But I didn't enjoy playing it. It felt very hectic; like you were forced to touch the springs, rather than doing it because you wanted to see what would happen. People were drawn to this weird controller, so I thought, 'Maybe it doesn't matter so much if the game is super tight.'" A slower pace was required, and *Rainbow Frog* was born, a game where the garden's coloured lights melt into different seasons and players touch springs to interact with skittering LED creatures.



***Super Light Combat*, Baumgarten's fighting game, ended up showing him the limitations of 1D. The LED strip's 100fps framerate made truly reactive play near-impossible, and so fostering a metagame was difficult**

"STARTING WITH THE MECHANIC IS A CHALLENGE THAT DOESN'T ALWAYS HAVE A GOOD RESULT"



Baumgarten is keen to push the boundaries of how we interface with games. "Pain hasn't been explored much as a concept," he says. His blade-avoidance game, *Knife To Meet You*, examines danger, risk and competitiveness

It's the simple thrill of new challenges and experiences that first inspired Baumgarten to teach himself circuitry and soldering and begin his hardware game experiments. It's why he continues to dedicate his time to them, too. "When you only work with computers on software games it gets very abstract and theoretical. But I really enjoy this combination of not only staring at a screen and changing little numbers, but also making hands-on things. It's a continuous discovery process." And the more he discovers, the more boundaries at which he finds himself compelled to push. "I feel like custom controllers can help make clear to people that games can be more than sitting with a standard gamepad on a standard videogame," he says. "This opening up of interfaces is what I'm going for."

Baumgarten has high hopes for the future of his hardware experiments: giant installations on the sides of towers, or even interactive furniture. Whatever he makes, however, the focus is always on developing interactions between player and controller. His latest concept is a button that, depending on how hard it is pressed, actively changes its resistance. "There's this weird internet subculture about keys and keyboards, like the Cherry MX and whatnot. There are all these graphs about pressure and when you press it, whether there's a click, or no click – or it's dampened, or not dampened. There's a whole other world there in this one question: what happens if you push things, and they push back?"

THE MAKING OF...



THE WITNESS

How Jonathan Blow's greatest work was founded not upon maze puzzles, but moments of magic

By Jen Simpkins

Format Android, iOS, PC, PS4, Xbox One
Developer/publisher Thekla, Inc
Origin US
Release 2016

The Witness is a game about maze puzzles, yes: more importantly, it is a game about how we communicate. The idea for the game was rattling around inside creator **Jonathan Blow**'s head long before he decided to make *Braid*, his breakthrough hit – and was also, in its own way, inspired by '80s Infocom text adventure *Trinity*. Written by Brian Moriarty, and taking the form of a prose poem about the atrocities of the atomic bomb, *Trinity* spoke to a young Blow, who attributes it to a shift in his mindset about what art, and videogames, could be. Just as *Braid* was never going to be just another platformer, *The Witness* was never just going to be about maze puzzles.

The Witness started as a side-project, a prototype in which you used mouse gestures to draw shapes on a screen and cast various spells. Blow visualised it as similar to *Arx Fatalis*, with new spells written on scrolls and hidden in dungeons for players to find. "But then, I had the idea that maybe the most powerful, or interesting, spells that you could cast were hidden in ways that you may or may not recognise," he says. "I had this picture of walking along a path and way up onto a mountain…" Anyone who has played *The Witness* will recognise this turn of events: a "magic moment", as Blow calls it, that made it into the final game, and would be the first, crucial distillation of *The Witness*' spirit.

But the spellcasting game was not to be. "If I knew what I know today, I might have gone back and made that game, because *The Witness* ended up being relatively large and a lot of work to make," Blow says. "But back then, I was thinking, 'I can't make this because it's going to be too big and complicated. I've got to do something easier than this; let me do a 2D game.' So I went off and did *Braid*. But that picture stood with me – of standing up on that mountain and realising something significant."

Developing *Braid* taught Blow a useful skill: to focus on the best part of a game's idea, and build something simpler around it. He cut away the spells, dungeons and monsters from his original concept, and was left with the mountain – and line-drawing. "I thought, maybe you can solve a puzzle in a maze – I don't know where that came from, but it was some application of being able to draw lines." As he explored the possibilities of this basic idea, thinking outside the puzzle pane alone, the two sides of *The Witness* started to come together.



In the keep, smaller maze puzzles are built into larger ones, exemplifying the game's philosophy of interconnectedness

"Now the puzzles weren't just an excuse for something. They were legitimate in their own way," Blow says. "*And* there was this extra part that also by itself could be the point of the game. So it just got bigger." Blow placed huge pressure on himself to fully flesh out *The Witness*' core conceit. "If we make a game about one or two ways that information in the environment could help solve a puzzle, then the game is about one or two ways. If we make a game about a bunch of ways, then the game is generally about the phenomenon. If a player plays to the end, and says, 'Wouldn't it have been cool if there had been something that you had to hear, and understand what the sound meant?' And I say, 'I never thought of that', then I failed as a designer."

"SOME PEOPLE SAY THAT THE GAME IS VERY REPETITIVE. AT ONE LEVEL, THAT IS TRUE. BUT IT'S INTENTIONAL"

Building *The Witness* was uniquely difficult; its non-traditional design demanded non-traditional solutions. But Blow's ultimate goal was to ensure everything in the game worked as an interconnected whole; that there was nothing that wasn't meaningful in some concrete way. *The Witness*' Technicolor island was made open-ended, with discrete zones able to be visited in any order. "It was about having faith that the player can take initiative, and has their own opinion about where they want to go, and what things they want to do right now," Blow says.

Each zone teaches the player a different set of symbols and rules for puzzles: not through any kind of verbal instruction, but as step-by-step series of puzzle panels, either placed adjacent to one another or connected to the next by a neon-lit wire. The beginning of each maze is marked by a circle, and the endpoint is visibly rounded off. You learn simply by trying, and failing, and eventually succeeding. Complete all required panels in a zone, and you'll activate a laser, seven of which you'll need to reach one of *The Witness*' two 'endings'.

Upon the game's release, many players bounced right off the prospect of hundreds of puzzles presented in a uniform way – in a world that, colourful as it is, can feel strangely cold. "It's intentionally a very static place," Blow says. Practical reasons contributed: Blow's development team was small, and needed to make a simple game without too many moving parts. But it was also an aesthetic choice. "I didn't want this to be a game where you're talking to people, because it's supposed to be about being introspective."

If *Braid* was Blow's first study of the power of non-verbal communication, *The Witness* would be his graduate thesis in how players might interpret, almost like body language, the deliberate placement of objects and objectives. "There's sort of a rapport that you can come to with the contents of the game. They talk to you." But he knew that not everyone would be able to hear the message. "Some people say that the game is very repetitive. At one level, that is true. It's intentional, because we're trying not to obfuscate the situation by making you figure out the basic differences in interactivity from one location to another. But the exciting part of the game is what goes on in your mind when you look at something and understand it."

The magic of *The Witness* is in that flash of insight on the mountain. "That really was the core of the game, and it's a very beautiful thing – but it's also a very delicate thing," Blow says. And so, panel by panel and zone by zone, *The Witness* begins to ask for a little more than just a line from A to B, sometimes gently directing attention beyond the puzzle panels themselves or requiring a change in perspective. It becomes more organic, less mechanic. It even makes *jokes*.

Most of these moments involve subverting expectations using the game's visual language ▶

of lines and grids, or require a more physical change in perspective as the player moves the camera into the right position. "But the intent is to not make that be the only thing. It's also about what you had to notice. Was it colour? Was it shape? Was it the negative space? So we tried to do those, and make them unique every time. It was the hardest design thing, because if I messed that up, then the game wasn't magical."

***The Witness* is** constructed around epiphany: the thrill of, having learned something new, seeing the world with fresh eyes. But while Blow is the magician, using misdirection so that we often don't see what's under our noses, it's the player that is given the responsibility of each trick's prestige. "If I'm walking you into the theatre and sitting you in one exact spot, putting glasses of a certain shape on you, and tilting your head in a certain direction, and then say, 'Look at the curtain!' and then I pull open the curtain and say 'Ta-dah!', that's just not going to be magical, right?" Blow says. "Maybe something clever happened, but it was so forced that it's not real. Coming to a real understanding has to involve the person's participation."

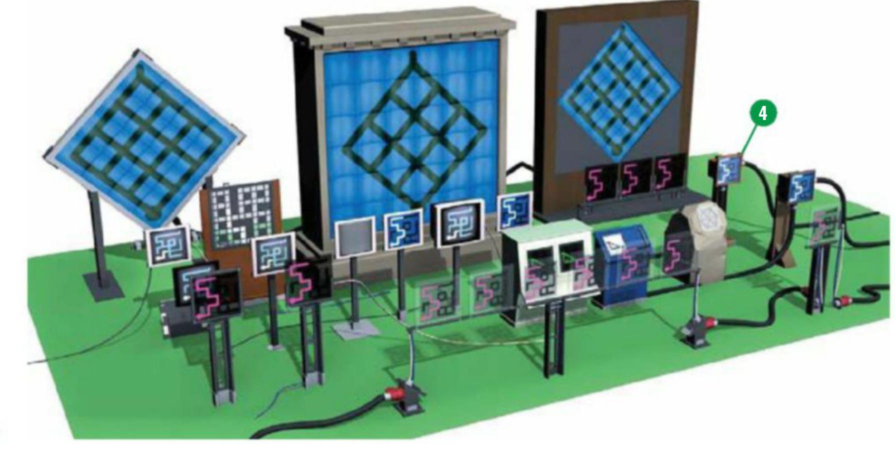
Audio logs and videos scattered about the island encourage further player involvement, featuring quotes that touch on ideas of science, religion and art. They're not collectibles, as such: technically, everything you find stays exactly where it is. "I prefer when rewards are internal to the game," Blow says. "In a totally different genre of game, you might have rewards that are different: a really good sword in an RPG, for example. *The Witness* doesn't really have anything like that. The explicit design decision was that there would be no inventory because it's all about carrying ideas around in your mind. So that made certain things difficult; you can't really fall back on tried-and-true game design." The constant visibility of activated lasers in the sky, stretching towards the mountain; the opening of doors around the island and hidden shortcuts as you progress; the quiet but satisfying audiovisual feedback of completing a panel: "Those things I regard as a softer, subtler equivalent of explicit rewards," Blow tells us. "I think some people critical of the game think it's some kind of sadistic exercise in denying acknowledgement for your achievements, but it's not that."

Quite the opposite. The concept of making a generous game was at the forefront of his mind, ▶











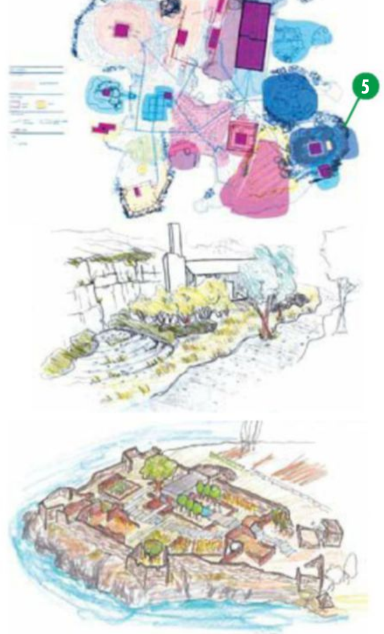












1 An early prototype of the island's windmill shows it partially submerged in water. The final version was made a substantially larger, more explorable structure, and given a much more central role in the game – serving as a hub for a certain type of collectible.
2 Deanna van Buren (centre) worked as lead architect on *The Witness*. Blow was keen to hire someone who had very little experience with videogames, although reconciling architectural designs with readable, player-friendly environments initally proved difficult.
3 Particular ideas for certain zones of the island took shape earlier on than others. The mountain (which grew to be much larger over the course of development) and its accompanying bunker were key features, as were the keep area and its hedge mazes. The town was the very last area added.
4 Some of artist Luis Antonio's earliest concepts for *The Witness*' puzzle panels. Visual variations on frames and monitors were designed to give the impression that some island technologies are older than others.
5 An annotated island overview, with a key indicating various points of interest – puzzle areas, interior spaces and paths of movement. In the top left, we see a suggestion for a placement of one of the many 'vaults'

thanks to a fairly recent GDC talk he attended by the author of *Trinity* and now-professor Brian Moriarty. "The part that I really found guiding," Blow says, "even before *The Witness*, back to *Braid* and earlier experiments, was the part where he talks about generosity. How the best things in the world are generous, and they give you what they have for free. And all it requires is your own investigation." Development began on *The Witness* back in 2008, at a time where manipulative Facebook games, achievements and microtransactions were taking off. "Many designers think, 'How do I make the player do something? How do I make the player put more money in the game?' And [Moriarty] was saying exactly the opposite thing – that the goal is, 'How do I make the most generous thing?' For both *Braid* and *The Witness*, that was a guiding principle." It is no coincidence, then, that Moriarty's lecture is one of *The Witness*' greatest rewards.

It's an inclusion symbolic of Blow's desire to give players an equally meaningful experience; a taste of inspiration. "I have a little bit of a reputation as a curmudgeon, where once in a while I'll say things… I've tried to become more aware of that over time, and do it less, but I'm very critical of things that are wrong in games. The thing that I think people never understood is that that's actually also my internal voice, and it applies much more to my own designs, because I see them much more closely. So the problems that I see are both deeper and much more numerous! And my job as a designer is to solve these, or make sure that what I give you to play is as free of those problems as I can humanly make them. That, combined with doing this in-depth exploration, and having to visit all these points in the space, is why the game got so big.

"I've played games for a long time now. I can feel when they're scoped down, and I don't like it," Blow says. "Luckily with *The Witness*, we had enough money to actually build out the full game, and so we didn't have to scope it down. I will always choose to do that if I have the option. I would rather make the better thing that has more value to give to people over the thing that I can get done expediently." Blow's fear, essentially, was that *The Witness* wouldn't be everything it was meant to be. "It was doubt that I was going to do the core idea justice, or that there would be enough beauty in the experience. I was always worried that I was being too ugly and clumsy."

Q&A

Jonathan Blow
Creator, The Witness

***The Witness* uses music sparingly. What inspired the use of Edvard Grieg's In The Hall Of The Mountain King?**
There was a game from the 1980s that I liked called *Mountain King*. You're searching for a flame: the flame is invisible, but you can hear where it is by listening to In The Hall Of The Mountain King. The closer you get, the louder the music is. For an '80s game, it was very interesting. That actually may be how I got inspired to think about any of this stuff: a lot of *The Witness* is about physical phenomena, like sound and light providing information.

Did you think deeply about in-game rewards?
I did. I like to give people the benefit of the doubt, not chime in every ten seconds and say, 'Good job!' I don't feel like those kind of screens ever make anyone really feel good. But there are achievements and trophies in the game. Certain platforms force you to have them add up to a number of points. The Steam version has the achievements that I prefer – two for the entire game. Both of those moments are noteworthy enough that a heavy-handed thing like a notification popping up is appropriate.

Looking back, is there anything you would have done differently?
I am mostly satisfied with the game, but there's one thing that I think is a mistake. In the central area – we call it the 'hub' internally – different ideas from around the island come together. The problem is we let people free-roam, and there's just a bit too much in terms of puzzles [in this area] that people are not equipped to deal with yet if they encounter them first. If I were doing the game again, I'd put a wall around it with one puzzle on it that looks intimidating.

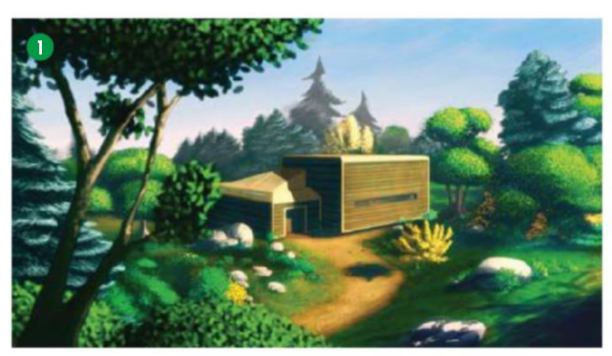
To say he needn't have worried is, perhaps, inaccurate: *The Witness* is sublime, but only because Blow cared so deeply about it as a tribute to his inspirations, to the nature of inspiration itself, and as a means of sharing that with others. In November 2017, professor Moriarty would go on to give a follow-up lecture at AdventureX about *The Witness*, having played it and understood the true extent of his impact on a teenage Blow. "You cannot know how or if the games you make will touch the lives of players," Moriarty says, his voice filled with emotion. "If we are remembered at all, it will only be because young people are so easily impressed." ■

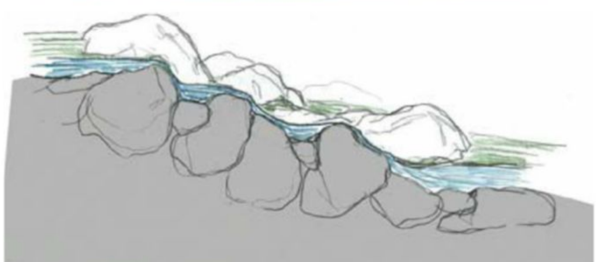


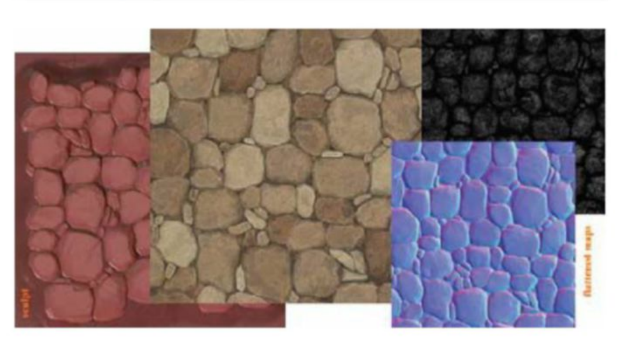


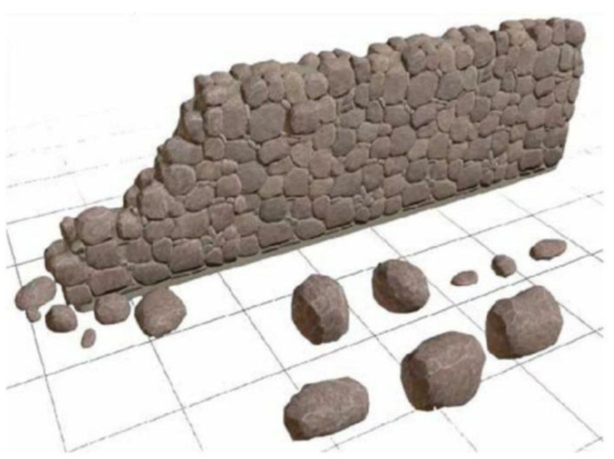


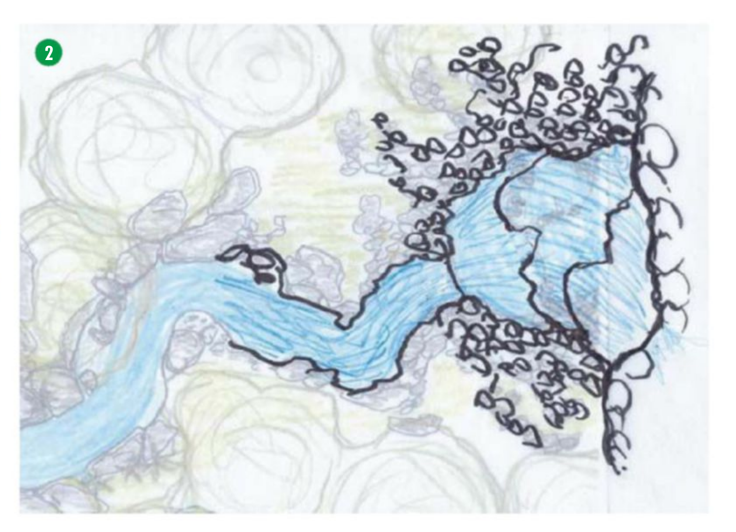




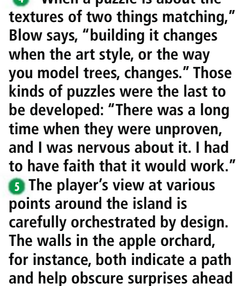




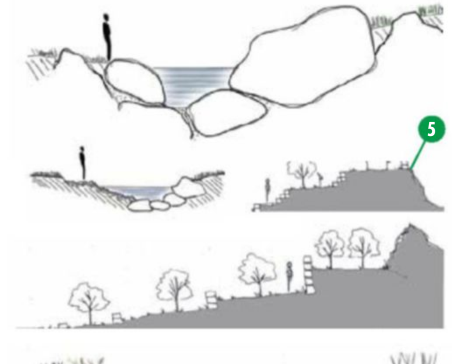




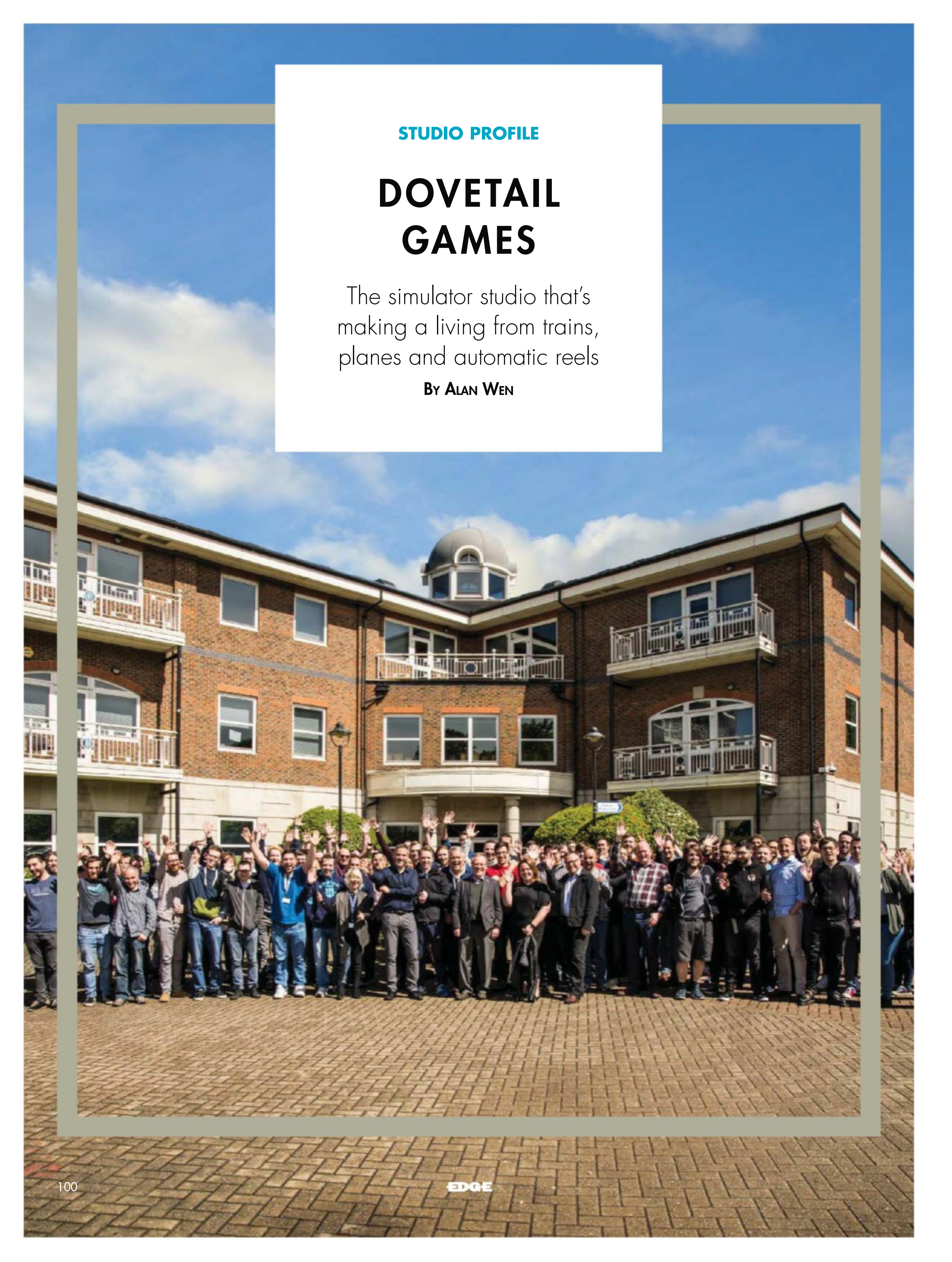




1 In the absence of a map, it was crucial to use form and colour to give each island zone its own distinct look, thereby making the space as a whole easily navigable at a glance.
2 This tracing of the mountain's small waterfall and stream shows the careful thought that went into its particular shape.
3 *The Witness*' artists rendered rocks and trees realistically in early models, before the team decided on a more minimalistic style in line with Blow's desire to minimise visual noise.
4 "When a puzzle is about the textures of two things matching," Blow says, "building it changes when the art style, or the way you model trees, changes." Those kinds of puzzles were the last to be developed: "There was a long time when they were unproven, and I was nervous about it. I had to have faith that it would work."
5 The player's view at various points around the island is carefully orchestrated by design. The walls in the apple orchard, for instance, both indicate a path and help obscure surprises ahead







STUDIO PROFILE

DOVETAIL GAMES

The simulator studio that's making a living from trains, planes and automatic reels

By Alan Wen

As far back as he can remember, **Paul Jackson** always wanted to be a train driver. Unfortunately for Dovetail Games' co-founder and CEO, he's colour blind – a test for which forms part of the medical – and it's not exactly a well-paid gig. Timing, too, was an issue. "The locomotives that I want to drive – the steam engines from the 1950s – they've all gone. That's not a viable career anymore," he tells us. "So to live out my personal dream, I needed a hobby."

That hobby would become a profession, and these days helping people live out their dreams is essentially Jackson's, and the studio's, business. Driving trains, flying planes or fishing for carp might not sound as immediately arresting as the more high-concept power fantasies games can offer, but Dovetail prides itself in replicating the real world in a beautiful way, safe in the knowledge there's an audience for its work.

Although simulations are often branded as a niche, Dovetail's output has a growing dedicated community of enthusiasts who see the benefits of also pursuing their real-world pastimes in a virtual setting. "Look, we're not here to stop you from going out to the riverbank or the lake," COO **Jon Rissik** says. "There's nothing better, if you're an angler, than to do it for real. But if you can't get out there, this is something good you can do that's close to what you love, in the comfort of your own home."

Dovetail was founded in 2008 under the distinctly more to-the-point name Railsimulator.com, specialising in a single discipline, the *Train Simulator* series. It was quite the change of track for Jackson: he'd spent 19 years at Electronic Arts, establishing its UK office and focusing on licensed, surefire mainstream hits including *FIFA* and *Harry Potter*. He was also involved in building the brand of one of the most successful simulators on the market, which would prove to be an invaluable experience.

"I'd seen, in *The Sims*, people taking a piece of technology and turning it into their hobby," he says. He wanted to apply that theory to a more authentic simulation, based on his personal passion. Around the same time, developer Kuju Entertainment was finishing work on the EA-published *Rail Simulator*. Once the project was complete, Kuju disbanded the team in order to move onto another project. Jackson saw the opportunity and seized it, acquiring the game engine and core development team to build upon the original simulation at a new company.





Prior to Dovetail, CEO Paul Jackson (left) and Rob O'Farrell (senior director of development) worked together at EA

Relaunched in 2009 on Steam under a new name, *RailWorks*, the game was eventually renamed *Train Simulator* and was the start of what Jackson refers to as Dovetail's embrace of the "simulation hobby model" – essentially committing to the software indefinitely. For *Train Simulator*, this meant improving the base game annually through free updates, while continuing to release a large selection of paid add-on content. "Hobbyists have a very wide range and very bespoke interests," Jackson says. "There wouldn't be tens of thousands of buyers, but it needs to have that huge selection of content – not because people buy everything, but because they have to be able to select those individual items they want to make the hobby *theirs*."

WHILE TRAIN SIMULATOR MAY HAVE ONLY FOUND A NICHE MARKET, IT'S BEEN A SUCCESSFUL ONE

While *Train Simulator* may have only found a niche market, it's been a successful one for the studio – and for the game, which has stayed on much the same route for the best part of a decade. Even after years of modifications, additions and updates, *Train Simulator 2018* is still based on Kuju's original engine.

And that, you might think, would be that; Jackson had successfully turned his hobby into a successful videogame, and you'd forgive Dovetail for sticking to a proven success, remaining a single-project studio and expanding *Train Simulator* indefinitely. It turns out, however, that Jackson is a man of many hobbies. "There are more hobbies out there that haven't been serviced in the way we've been servicing train enthusiasts," he says of the studio's decision to



Founded 2008 (as Railsimulator.com Ltd)
Employees 148
Key staff Paul Jackson (CEO), Jon Rissik (COO), Rob O'Farrell (senior director of development), Steve Hood (creative director)
URL dovetailgames.com
Selected softography *Train Simulator*, *Euro Fishing*, *Flight School*
Current projects *Flight Sim World*, *Train Sim World*

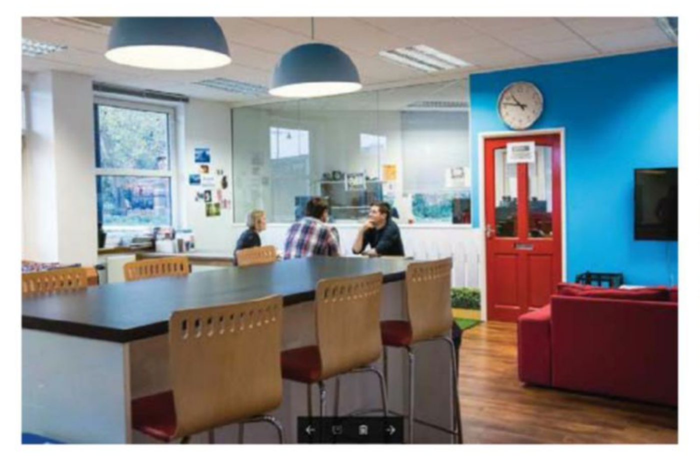
branch out. The studio rebranded itself as Dovetail at the end of 2013 and began to expand, bringing in more industry expertise, including Jackson's former EA colleagues Rissik and **Rob O'Farrell**, now the studio's senior vice president of development.

For Rissik, the lure of a smaller studio came from a desire to put his stamp on a business, which he knew he'd never get a chance to do while working for a multinational company of so rigid a structure as EA. But his approach to the simulation genre would be no different to the high-profile releases he'd worked on, including *Battlefield*, *Lord Of The Rings* and *FIFA*. "The mission has been about getting simulation to take a step up into the light," Rissik says. "To hold it to the same account that other genres are held to."

"I never thought I'd end up playing with trains," adds O'Farrell, whose EA CV includes credits on the *Burnout* and *Need For Speed* series. Despite a change of machines and mindset, the same principles applied, albeit without a memorable rhyme. "Here," he says, "we make sure our train's the star."

O'Farrell's background in multiplatform development was also an asset for Dovetail's plans to expand beyond PC. To achieve this, the studio realised, would mean leaving behind its ageing tech. It settled, as so many others have, on Unreal Engine 4. "It was the right platform for us because it allows us to deliver two things we really focus on," says Jackson. "Authenticity, and making it beautiful." *Euro Fishing*, released in 2014, was the studio's first Unreal game, and would later become its first console release, launching on Xbox One and PS4 in 2016.

Unreal wasn't Dovetail's only new tech investment. During 2014 it also inked a global ▶





The studio overlooks the Chatham Historic Dockyard in Kent, while a second office operates in Stirling, Scotland. Despite its growth, it's avoided the trappings of larger studios. "[At Dovetail] value in the individual is more important than the product," says O'Farrell

licensing deal with Microsoft, not only acquiring the rights to port *Microsoft Flight Simulator X* to Steam, but to build on that engine to create a whole new flight sim. This began with the entry-level *Flight School* in 2016 followed by *Flight Sim World*, which launched on Steam Early Access last year. With *Train Simulator*'s generations-old roots keeping it in the confines of that old Kuju tech, the team decided to use Unreal to build an entirely new train game fit for current-gen hardware. *Train Sim World* expands the simulation by offering an even more detailed picture of the world around the locomotives. Besides driving trains, players can now also walk around accurately recreated station platforms populated with other passengers, or even just sit back and relax in a first-class carriage.

With three hobby sims on the go, Dovetail has grown substantially in the past few years, having almost tripled its headcount in the last five years. The studio employs a blend of developers with a next-gen skillset (including alumni from Square Enix, Sony and Codemasters) with a host of subject-matter enthusiasts to ensure it gets its specialised real-world hobbies right. Even with its own keen train, angling and flight fanatics – the core *Flight Sim World* staff have also qualified as pilots, as you do – the studio's learned the importance of taking on board feedback from its passionate community as it seeks to make its simulations feel just like the real thing.

It turns out that the forums for seemingly pleasant pastimes can become every bit as heated as any other gaming community, albeit for different reasons. "There's a good chance that there are people out there who *do* know that world better than we do," says Rissik. "They may actually be a pilot! You can imagine the sort of feedback you get from them when you do get it wrong."

Authenticity, clearly, can breed conflict. In the case of *Euro Fishing*, player feedback led to a well-received update that changed baiting and the way fish fought, but a real fishing trip can also be one that ends up with no catch, as one studio colleague learned on a three-day fishing trip to France. "I can't make it like that because it wouldn't be entertaining," O'Farrell laughs. "We want to broaden it, and take the team's mindset to, 'More people will play your game if you just tweak a few things to make it more accessible'. We have to get that balance right."

Jackson likens this parlous balancing act to giving the player training wheels, which help ease a novice into the game while leaving them free to take them off when they feel read. "We have to be fundamentally authentic and give a roadmap to a player who may have no skills at all," he says. "Some will want to get to the point where they can fly a real plane or drive a real train, but many will stop at the point that they find enjoyable. We need to make sure we have the right content available to help sustain them."

"WE HAVE TO BE FUNDAMENTALLY AUTHENTIC AND GIVE A ROADMAP TO A PLAYER WHO MAY HAVE NO SKILLS"

Dovetail is naturally more comfortable with luring in players already invested in its hobbies, whether it's making appearances at railway exhibition shows or on the cover of *Total Carp* magazine, as opposed to converting 'gamers'. It's also looking to reach new markets, having recently secured a deal with Tencent to release *Train Simulator* on its WeGame platform in China.

Between railways, runways and riverbanks, Dovetail's certainly got a lot on its plate. Given the long-term plans it has for its games, new ideas are key; *Euro Fishing* currently features carp and coarse fishing, but Rissik fires off a handful of other areas the game could expand to. "I could show you a fishing plan. It'll take the next five years for us to deliver it," he laughs.

Dovetail's mission to become the 'number one simulation entertainment company in the world' isn't just about the quality, or quantity, of its simulations – it's about studio culture, too. Business and development work in harmony side-by-side in its open-plan office; despite the company's rapid growth, it still holds weekly all-hands meetings. But ultimately, it's about having a strong connection with a community it's committed to maintaining and growing. "The connection is so much stronger than it ever was on the games I released in the past," says Rissik. "The industry is changing, to some extent, throughout – these days, there has to be more connection between your game and what the community wants."

What Dovetail wants, however, is for its rolling stock to finally break free of PC. The studio is currently preoccupied with making sure that the CPUs of current-gen consoles can cope with *Train Sim World*'s simulation. But Jackson is convinced that, if that problem can be solved, there's a market for what the game offers on PS4 and Xbox One. "If anything, the console audience is desperate for a change from the standard diet they're fed," he says. "We're providing it." ■



1 Unreal Engine 4 allowed Dovetail to replicate the real world in a beautiful way, which made *Euro Fishing*, with its detailed fish and serene locales, an apt fit. 2 This would go on to inform the work that went into *Train Sim World*, a significant technological step up from its long-running *Train Simulator* series. Both simulations have a greater sense of immersion too, as players are free to walk around the environments. 3 While *Flight Sim World* is still based on the decade-old engine used for *Microsoft Flight Simulator X*, it also implements new features such as Truesky, which renders more realistic weather effects, simulating both the beautiful and the turbulent conditions pilots may experience in the air



REVIEWS. PERSPECTIVES. INTERVIEWS. AND SOME NUMBERS

STILL PLAYING

Nier: Automata PS4
Judging by the feedback we've received, *Automata* was one of the most surprising omissions from **E**315's The Edge Awards, so we dispatched an absolute *Nier* novice to the frontlines of Yoko Taro's emotive action-RPG. And our embedded reporter believes, ten or so hours in, that we made the right decision. *Automata*'s story may be brilliant, but it takes a little too long to show its hand. We've insisted our correspondent continues, however, and we'll keep you posted.

Super Mario Odyssey Switch
The longer you play *Odyssey*, the more you start to notice the seams; at some point you'll wonder whether the similarity of your to-do list reflects a Nintendo running out of ideas in its desire to give you 999 things to do. Yet each feels different enough, precisely because of those worlds: trace-walking on ice is different from grass, as is a foot-race across water versus one in the desert. Here, familiarity breeds incentive – you've done it elsewhere, so you can surely do it here – rather than contempt.

Super Meat Boy Switch
The launch-day Switch sales of Team Meat's platformer came very close to its Xbox 360 debut numbers. Indeed, multiple years, ports and completions later, it's still hard to resist yet another mad dash through the buzzsaw gauntlet – especially as the format so perfectly suits the Switch's pick-up and-play design. Sadly, Danny Baranowsky's original soundtrack is absent, but this version does offer two-player Race Mode. After eight years of practice, however, we're running out of willing victi- er, opponents.

REVIEWED THIS ISSUE



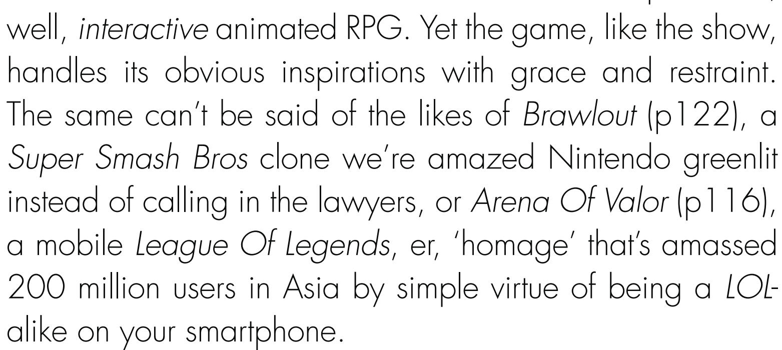
Explore the iPad edition of **Edge** for extra Play content

One for sorrow, two for joy

Great artists steal, they say – but game developers are magpies, pinching ideas from a variety of sources and using them as the seeds of something bigger. It's a rare month indeed that yields a Play section whose formative influences aren't immediately obvious.

Even in that context, *Lost Sphear* (p114) is something of an outlier. The second game from Tokyo RPG Factory, a small Square Enix team tasked with revisiting the publisher's 16bit glory days, the game's inspirations are essentially its maker's mission statement. But it takes the idea to new extremes, since the idea of forgotten memories being reborn also forms the basis of *Lost Sphear*'s narrative.





Elsewhere, *OK KO! Let's Play Heroes* (p110) is a work of brain-melting circularity, a tie-in game based on a TV show that has itself been clearly inspired by videogames, a non-interactive animated RPG which has in turn sparked a, well, *interactive* animated RPG. Yet the game, like the show, handles its obvious inspirations with grace and restraint. The same can't be said of the likes of *Brawlout* (p122), a *Super Smash Bros* clone we're amazed Nintendo greenlit instead of calling in the lawyers, or *Arena Of Valor* (p116), a mobile *League Of Legends*, er, 'homage' that's amassed 200 million users in Asia by simple virtue of being a *LOL*-alike on your smartphone.

Those are numbers that not even *Playerunknown's Battlegrounds* (p106) can match. Brendan Greene's game, like the rest of this month's Play crop, would not exist without its inspirations – the novels, films, games and mods that set in motion an astonishing success story. But it is remarkable not for what it borrows from the industry, but what it gives it; a new template from which many games will draw in the months and years to come.

Playerunknown's Battlegrounds

Perhaps, in retrospect, *PUBG* was always going to be a seismic industry event. The first game to successfully leverage all the component parts of survival gaming worth keeping and repackage them into a structured and finite experience? Come on. That was always going to be 20-million-player stuff. The droves of survivalists cruising through *DayZ*'s grim topography, the amoral nudists of *Rust*, even *Minecraft*'s Rube Goldberg machine builders – all could prove turncoats if offered an alternative to no-constraints survival sandboxing. Brendan Greene provided it.

Rather than simply handing over a sprawling dystopian space and trusting the player base to find the potential within it by itself, *PUBG* strong-arms its population into a specific and perpetually tense set of conditions that funnels people together into combat and demands a resolution to every game. It does so by channelling Koushun Takami's Battle Royale and Suzanne Collins' The Hunger Games: 100 players forced to fight to the death on a remote island, scuttling towards an ever-diminishing safe zone, scavenging weapons as they go. Brendan Greene and PUBG Corporation weren't the first to see the potential of a blend of survival gaming and Battle Royale, but they were the first to crosspollinate them in a way that holds an immediate draw when you press Start.

And they did so with a deft touch. Deliberately or not, *PUBG* creates an animosity between players that's vital to the premise holding weight, simply by placing them all in such close proximity at spawn and enabling a public voice-chat function. When Sartre said, "Hell is other people", we can now be reasonably certain that he was referring directly to a cargo-plane ride above Erangel in the company of 99 chatty racists.

We digress. More than marksmanship or reaction times, this is a game about decisions. The first is when to jump from the plane. It often proves the most consequential choice you'll make all match, and by letting you leap out in any particular direction, rather than spawning everyone at random, *PUBG* invests you instantly: you chose this spot, now make it work. Weapons and equipment spawn in different locations every time, but the geography of both maps remains the same, and within them are areas where the good stuff is. Of course, nearly everyone else knows about the rich pickings around Erangel's school and Mirarmar's Hacienda del Patron, so every jump is about second-guessing the opposition and betting on yourself to get the goods. This soft-touch randomisation, along with the plane's different flight paths across the island, did much to sustain *PUBG*'s 20 million players through early access when Erangel was the sole available map.

Then there are the decisions you don't know you're making. The door left absent-mindedly open that tells everyone nearby your location. The desperate sprint through open fields to reach the next safe zone, because you spent so long looting the Mylta power plant. The lolloping melee scrap with a stranger wielding a scythe – a *scythe* – whom you didn't see parachuting down to the same building as you. It's these micro-choices, rather than raw gunskill, that separate the great players from the rest of the pack. That's a big part of the game's long-term appeal. The ghillie-suited sniper who killed you was smarter than you for the last ten minutes, not more slavishly dedicated for 1,000 hours, and you both started with nothing. You're not priced out of the community's time economy in the same way that less devoted players often are in these particularly popular competitive phenomena.

Developer PUBG Corporation
Publisher PUBG Corporation, Microsoft Studios
Format PC (tested), Xbox One
Release Out now

PUBG creates an animosity between players that's vital to the premise holding weight



The remaining choice – whether to play alone or as part of a team – is the biggest of all. Sometimes, as you sit alone and motionless on your haunches in an eastern-bloc townhouse for five solid minutes, it feels like *PUBG* is a completely different game when played solo. Its strongest asset is its capacity to regularly make things happen that deserve to be immortalised in anecdotes – the motorcycle barrel rolls, frying pan headshots, naked escapes, impromptu hiding places and feats of Dacia-bound daring – so it goes without saying that all those moments are better enjoyed in the company of allies. It's easier to stay hidden, to make consistently wise decisions, and to resist the urge to goad, showboat, or hatch harebrained schemes when you're playing solo. But it's more enjoyable, and more memorable, to do all those things wrong and talk about them afterwards with your friends. That *PUBG* has been consistently at the summit of Twitch's viewing charts since launch should come as no surprise, then, although whether its popularity can be attributed to streamers or vice versa is a debate we'll save for another day.

The caveat here is that being the first to die in a *PUBG* squad is a particularly cruel fate. There are no mid-round respawns, so if you're shredded by a stranger's shotgun in the opening minute, your only option is to spectate as your surviving squadmates have all the fun. You're there to witness their travails and keep chatting on Discord if you like, but you won't shake the feeling of distance, or of having let the side down. In that way, *PUBG*'s spectator mode feels like watching the gameshow host wheel out the prizes you could have won. New to the final release is a deathcam feature which adds another item on the 'Things to do in *PUBG* when you're dead' list, and it's always a grimly compelling watch. Primarily, though, it has the whiff of an anti-cheat measure, and in this area the team at PUBG Corporation have a long road ahead of them. According to anti-cheat service Battleye, over 322,000 cheaters were banned between its early access launch and October 2017, and although the pre-release ▶

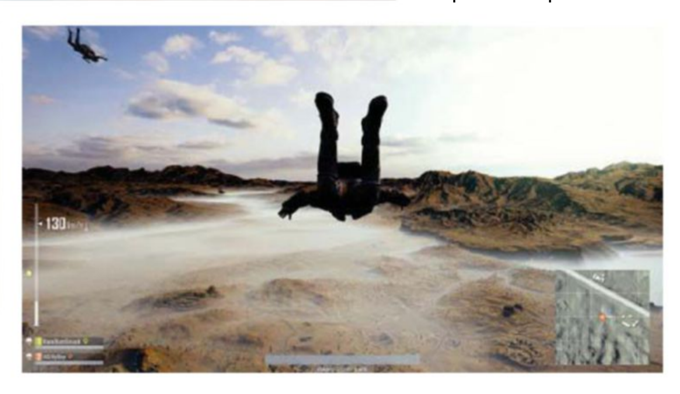


ABOVE The peculiar thrill of breaking back into prison in Miramar is compounded by the fact you spawn here, too. Unlike Erangel's spawn island, though, it's a poor zone for loot drops. **LEFT** Moments of out-and-out combat are rare, but there's always a sense of progression even in the quieter moments, as you hear and see others picked off

BELOW It's not really the kind of game where you stop and take in the view, but in the rare moments when you're allowed a second to digest the surroundings, *PUBG* is capable of real splendour



ABOVE The motorcycle: a brave mode of transport at the best of times, but never more so than on an island populated exclusively by gunmen. It's probably safer to get behind the wheel of a UAZ or Dacia instead



Opening fire on someone is often every bit as as stressful as being fired upon, since the sound of gunfire alerts nearby foes to your presence. In other words, if you're going to shoot, you'd better make sure it hits

narrative about exploit levels being out of control was exaggerated it's still present now, and it's still a problem. Deathcams weed out the most obvious aimbots, but it's going to take time and considerable effort to clean up the streets of Erangel and Miramar.

And here's a thing: cheating's especially hard to detect while you play, because honest players are often staggeringly devious. Some like to lie prone under vehicles and spring up in ambush; some litter houses with attractive loot and then lie in wait, like Kevin McCallister in kevlar, watching their baited traps. It's even been known for folks to fool their foes by playing dead. This is a game that's deceptively rich in strategic possibilities, especially so given how often it struggles to implement the complex mechanics of 'person jumping over thing' or 'man opens door'.

If anyone was hoping that this inherent clunkiness to all movement and interaction, this sensation of moving a gun-toting washing machine around in the world, would be solved by a final release, they were a naive soul who doesn't appreciate that horrible movement control is simply a genre convention of any game that's been within 100 feet of the *Arma* franchise. *PUBG*'s origins lie in *DayZ* modding – itself an *Arma* mod – and in *Arma III* itself, and it shows. The tradeoff for those huge maps filled with dozens of vehicles is the knowledge that you'll never truly be able to trust whether your bullets will pass through that chain-link fence, and that climbing through a window will always feel like you're playing a terrible, 20-year-old game.

That's not to say *PUBG* fails in that rarest and most difficult of feats, though: graduating from early access to bona fide final release. This doesn't feel like an arbitrary version 1.0 by any means – everything currently within the game feels finalised, at least on PC. A decade ago you'd have looked at a multiplayer game with only two maps as some kind of throwback to the demo-disc days, but this is something new. It doesn't have an existing point of comparison. Miramar dwarfs Erangel's two islands, and its dusty hispanic climes are a welcome holiday from eastern-bloc brutalism. Volkswagen camper vans line the highways; squads squabble over much bigger patches of turf; there are new vantage points to be learned, new schemes to be hatched. Numerically two maps seems meagre, but their combined space – both physically, and in terms of their possibilities – is anything but.

Look for reasons to dislike *Playerunknown's Battlegrounds*, and you'll find them. It's often tempting to want to discover that the emperor of the moment has no clothes, and when the emperor in question displays its roots in modding and early access this prominently, it might even seem extraordinary to some that such a barebones experience could garner such popularity. It doesn't have the cold, clinical polish of a major publisher's venture, and it may never do so. What it does have is something an Activision or EA would kill for: a game built up around one good idea that drew in a community of unprecedented size. And that counts for a lot against *PUBG*'s flaws: its rough-edged movement, animations, collision detection, character customisation, spectator functionality, and presentation. Perhaps you might hear all that and think this isn't worth your time. To do so would be to miss out on an absolute, and absolutely deserving, phenomenon.

9



X RATED

It hasn't all been rainbows and unicorns for *PUBG*'s PC version during early access, but all that time and data was obviously handy for optimisation and bug-squashing in the final release. Over on Xbox One though, where Phil Spencer and co were so proud to bag its console exclusivity, performance has been a sore point from day one. Reports abound of unstable framerates and controller input lag on both the One and One X, and despite a steady stream of updates since launch, those complaints have yet to fully simmer down. The PC version may have left early access, but now PUBG Corp must do it all over again.

Post Script

With PUBG's impact impossible to ignore, is 2018 set to be the year of the royale rumble?

One of the great certainties of the game industry is that breakthrough hits beget unapologetic copycats pretty quickly. In 2017 we witnessed the rapid rise of the battle royale, so one might reasonably expect to be packed tightly against the back wall of one's living room by a deluge of them this year – after all, PUBG Corporation sold over 20 million copies during early access alone, and there's not a developer or publisher on the planet that would say no to those numbers. But *Battlegrounds* is an outsider hit that didn't come from the industry's established players. There's no intro cutscene, not a line of dialogue, and no collectables. It doesn't look, or play, like the games big studios make. It's a sort of punk rock, three-mechanics-and-the-truth incarnation. So exactly how can the industry establishment cash in on this new genre's exploding popularity? Perhaps more to the point, can it do so without the threat of legal action?

The latter became a salient point when Epic – which, lest we forget, makes Unreal, the engine on which *PUBG* runs – released *Fortnite: Battle Royale*. It was a spinoff from a game that had been gestating for six years only to be eclipsed by Brendan Greene's title upon release, and it drew inspiration from the latter so much that it name-checked it explicitly in press releases. A week after *Fortnite: Battle Royale* launched, it became a standalone game, and a free download. Since Epic already had the base game shipped to consoles, it managed to beat the game that inspired it to those platforms when the *Battle Royale* update went live. *Battlegrounds'* creators weren't ready to take the 'sincerest form of flattery' stance: "After listening to the growing feedback from our community and reviewing the gameplay for ourselves," producer Chang Han Kim said in a statement, "we are concerned that *Fortnite* may be replicating the experience for which *PUBG* is known… The *PUBG* community has and continues to provide evidence of the many similarities as we contemplate further action."

The nature of that action has yet to come to light, if indeed it was taken, but it raises an old question about what might reasonably be considered a genre convention – and thus fair game for widespread implementation – and what constitutes plagiarism. Early indications suggest that it'll be trickier for rival developers to borrow liberally from the trailblazers and look their audience in the eye, since the 'genre conventions' are so specific. Surely there's another way to begin these games than by parachuting from a plane – or airborne 'battle bus', as *Fortnite* would have it – for example?

But that's only one factor in determining the anticipated onslaught of new battle-royale games. The larger is how other developers might choose to go about it. *PUBG* had the luxury of entering the market without any expectations, nor shareholders to please, nor any existing fanbase to annoy. Studios under the banners of platform holders and major publishers such as EA, Activision, or Ubisoft would not have those luxuries. But will they take the plunge anyway?

Early indications suggest that it'll be trickier for rival developers to borrow liberally from the trailblazers



Based on 2017's crop of major game announcements: no. At least not via the usual channels. Last year's conferences showed the influence of *PUBG* across the industry, but it did so via indie titles, unproven studios, struggling F2P games that were probably more inspired by *Fortnite*'s makeover than *PUBG* itself, and the odd big-name side-mode, such as *GTA Online*'s stripped-down Motor Wars. That aside, the big players have stayed largely silent until now.

For the time being, the only viable option for established companies is that of updates to existing IPs. *Dying Light: Bad Blood*, *Paladins: Battlegrounds*, and of course *Fortnite: Battle Royale* are able to lay claim to some of that essential 'throwaway mod' appeal at the heart of the genre by positioning themselves as fun diversions from the main attraction. Plus they have the advantage of a ready-baked community. Hey – they're just having fun with a new update, no big deal. Why not give it a try? It's the same principle as political astroturfing, effectively, but judging by Epic's success in gaining an audience for *Fortnite*, it works.

To Epic's credit, the on-the-fly crafting and construction mechanics *Fortnite* offers do make for some meaningful changes to the *PUBG* blueprint, and thanks to its millions-strong player base those additions have quickly been osmosed into the battle-royale genre. And that makes it easier for others to follow suit without appearing uninspired or cynical: as the genre's palette expands, development becomes a question of which elements to include, which to reject, and which are in need of a new slant. If everyone's been humming the right cosmic frequency during the dev cycle, the end result comes out looking distinct, and publishers have some USPs to enthuse about under the hot conference floor lights.

The genre's already established itself, then, but perhaps we shouldn't expect the tsunami of me-too titles in 2018 and beyond that prior industry form has taught us to. Still, everyone will be watching *The Darwin Project*, *SOS*, *Islands Of Nyne* and the like very closely in the coming months to see if they can pull players away from *PUBG*. Just as streamers helped drive *PUBG*'s success, so they will ultimately decide whether the games inspired by it find an audience. One popular *Fortnite* streamer said it all recently: "If you're trying to make it on Twitch, my advice would be to jump on any new BR game the second it drops." ■

OK KO! Let's Play Heroes

We spend a good five hours waiting for an 'All Your Base' gag that never comes. The Cartoon Network animation on which Capy's latest outing is based is clearly made by a team in love with videogames, but there's little of the pandering nodding and winking you might expect here. Yes, there are references to games, such as the line about them being better than real life ("You get points!"), but *OK KO! Let's Play Heroes* is cheeringly matter-of-fact about its inspirations, preferring to build its own world rather than remind you of someone else's. Little wonder, really, given the set-up, which is arguably better suited to a game than a kids' TV show.

The denizens of Lakewood Plaza Turbo, a small, colourful strip mall, are all heroes – officially so. It's proven by their Pow card, a gleaming foil effort that shows their hero level, built up over a lifetime's worth of doing good. Protagonist KO's mother, a burly martial-arts instructor, is a lofty level 11. Rad, a dudebro alien who works with KO at the local mini-mart, Gar's Bodega, is a respectable level three. KO, however, is yet to get his card. He spends his days running errands for his boss and co-workers, pumping his daily wages into the bodega's Pow vending machine in the hope of finally getting a card that's adorned by his dinky frame. When it finally comes out, it's a level zero; immediately, every other hero has their card progress reset to the same number. Suddenly KO's path to true heroism is clear: he must find out what happened, then help his friends get their hero levels back – while, hopefully, also gaining one to call his own.

The culprit is Lord Boxman, a classically trained cartoon villain based across the road in a factory that specialises in wise-cracking battle robots. KO, despite his supposed lack of heroism, is wonderfully adept at fighting them. Combat is the beating heart of *Let's Play Heroes*, set on a scrolling 2D plane using a system that owes more than a small debt to versus fighting games, and the *Marvel Vs Capcom* series in particular. It's there in the simplicity of normal attacks, mapped here to a single button, with D-pad modifiers hitting low or launching. It's in the air too, where you'll quickly realise you can dash after an opponent you've just knocked away to continue the assault – but try to loop it too many times and they'll flip out to safety.

It's especially obvious in the Powie Zowie system, a sort of hybrid of assist move and super combo. Once you've helped out an NPC a few times, you'll unlock their Zowie for use in battle, its cooldown timer shortened by successfully landing attacks. Some of the earliest acquisitions are the most useful: Rad's floats KO high the air, invincible, his finger-gun motions producing volleys of damaging ordnance. Mommy's equivalent sees her rush on the screen with a charge punch, uppercut and ground slam. Others offer handy, or just weird, buffs – if you've ever wanted to be turned super-small by a rabbit named Potato, you're covered.

When used in combination with KO's steadily expanding moveset (a charge punch, a shoryuken, a ground pound), they reveal a combat system of depth and flexibility, which is surprising given how gently kid-friendly the rest of the game is. Zowies can be activated at any time providing you're not recovering from taking a hit, and enemies are politely standoffish for the most part, attacking one or two at a time. They seem happy to let you experiment, the combo counter quickly reaching the dozens as you get in a few hits, knock them up in the air then away, calling in one friend to keep up the combo while you close in for your next assault. Developer Capy increases the challenge not with harder hits or bigger health bars, but with irritants – small flying robots with spinning buzzsaws, for instance – and the occasional puzzle (putting an enemy on a high platform you can't reach by jumping, say). It's an effective blend whose only real disappointment is its boss battles; each has only a handful of attacks, and fights are over almost apologetically quickly.

Battles account for around half the game, and unless you're a fan of the TV series it's much the better one. While the cast of characters are an affable bunch and frequently very funny, the things they ask you to do in order to help restore their Pow cards to their former glory are a different story. The Plaza starts out small and doesn't get much bigger, and KO spends much of his day running endless laps of it looking for whichever misplaced MacGuffin or wandering NPC he's been asked to track down this time. Some of these fetch quests can feel laboriously drawn out, while others are padded further by paths being cruelly locked off; if someone's forgotten to unlock a gate or loading-bay door, you're forced to take the long way round, the game punishing you for trying to be efficient. It's needless padding in a game of already generous length that's at its best when you're fighting or talking to people. Sadly, you'll spend a little too much of the game doing neither.

Yet there are few moments of irritation in a game which goes out of its way to be so likeable. KO is an easy fellow to root for, and while you can theoretically stomp through the main quest without helping out the various wackily designed denizens of Lakewood Plaza Turbo, you'll be scuppering yourself if you do. That'd mean missing out on a beast of broccoli made flesh that's afraid of its own shadow; on a skeleton whose low self-esteem is holding him back from his dream of being a magician; on a sardonic cashier with an eye on musical stardom; and on, for heaven's sake, a rabbit called Potato. Heroes, one and all, and all of them in need of your help. So long as a punch-up's involved, you'll be only too happy to oblige.

7

Developer Capy Games
Publisher Cartoon Network
Format PC, PS4, Xbox One
Release Out now

Battles account for around half the game, and unless you're a fan of the TV series it's much the better one



STATS OFF
Every battle ends with you smacking up a pinata modelled on Lord Boxman, its candied guts granting you XP in three categories: strength, speed and cool. Payouts are modest, with even a long, stylish fight yielding an imperceptible chunk of a level-up bar that takes an age to fill. You can chivvy things along a little by purchasing items that grant an automatically applied multiplier to one stat in your next fight. While fine in theory, in practice it doesn't really work; your next battle might be against a couple of weedy enemies with a poor payout. And even if your luck's in, the reward still feels miserly. Crinkly Wrinkly, a wizened old NPC, recalls the halcyon days of his youth thus: "In my day, stat boosters were frowned upon." They still are, old stick.

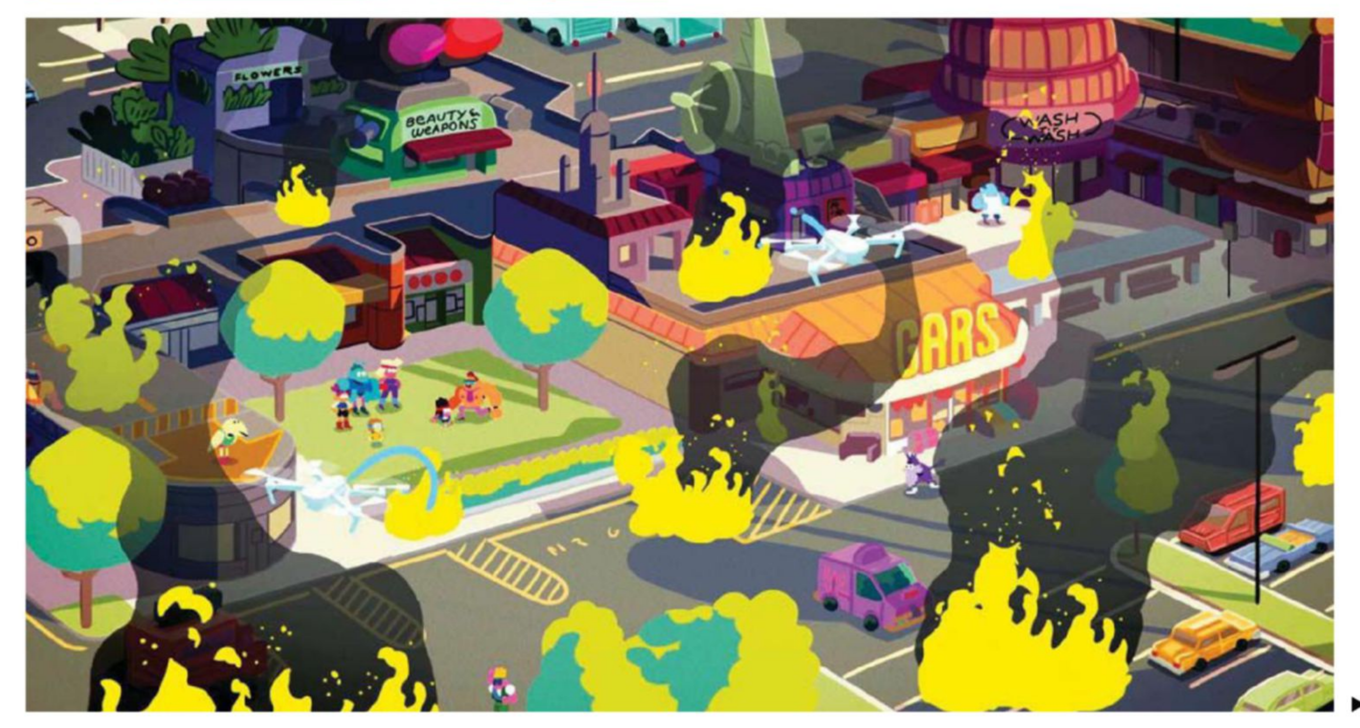
RIGHT Ashly Burch's Enid is a little more complex than the rest of the cast; while most are happy enough with their lot, she wants to escape the Plaza and become a musician. BELOW Mommy's Powie Zowie is fast, damaging and very useful, though occasionally misses a target you were convinced it would hit. MAIN Despite the Plaza's lack of size, several premises, such as the Wash The Wash laundromat, remain inaccessible throughout the story

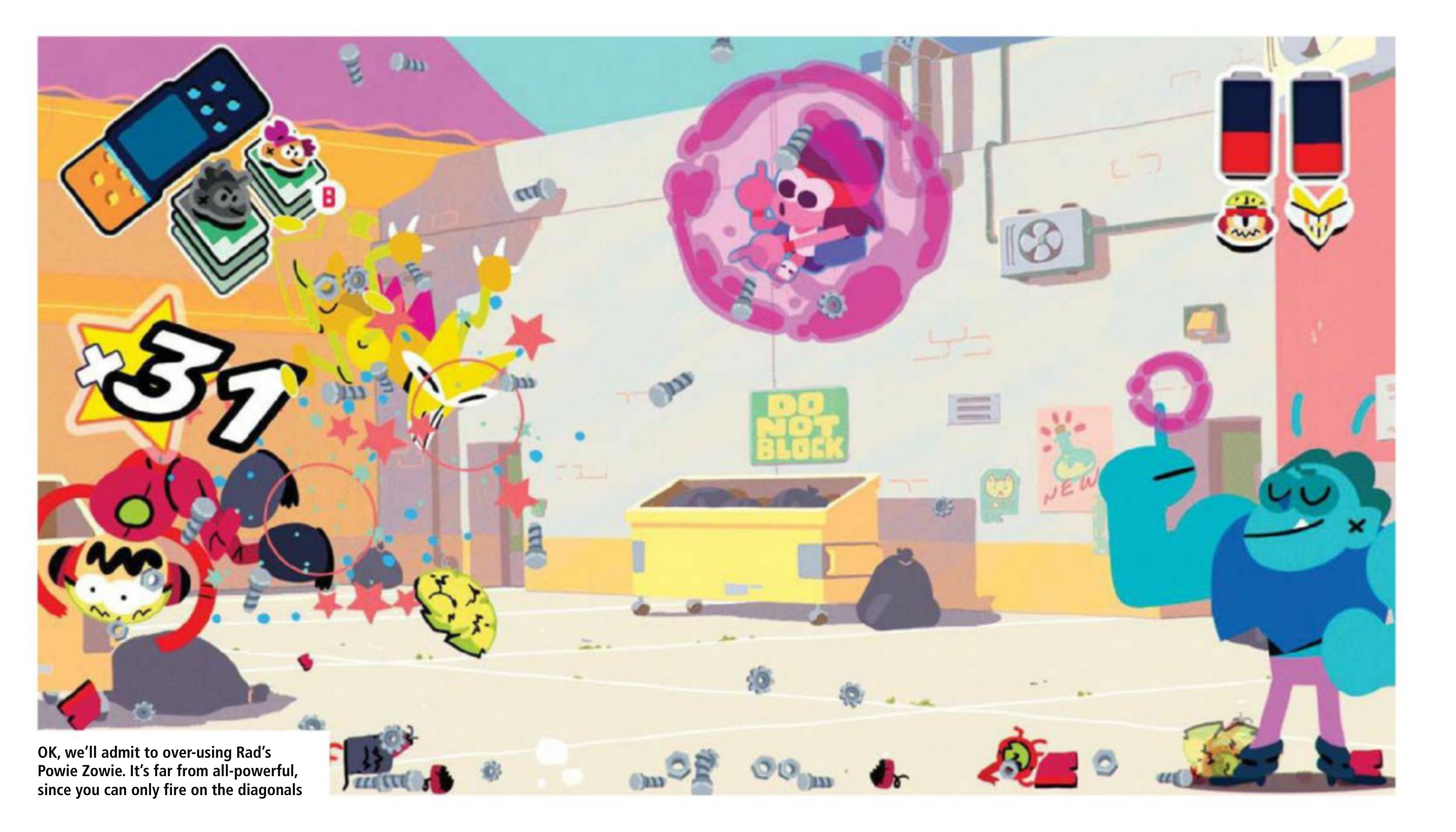






ABOVE Gar, owner of the eponymous bodega, is the only Lakewood hero besides KO's mother to reach level 11 hero status. He's also quite clearly in love with her, and there are frequent hints at a shared romantic past





OK, we'll admit to over-using Rad's Powie Zowie. It's far from all-powerful, since you can only fire on the diagonals

Post Script

Smoothing out the skill curve: in praise of simple combat systems

Back in 2013, Wolfire Games made a prototype for the 7-Day FPS Challenge called *Receiver* in which you had to manually load your handgun before you could fire it. You needed to unholster the magazine, remove the clip and load bullets into it one by one, then reinsert it, turn off the safety, release the slide lock and pull back the hammer. Only then could you think about pointing and shooting, which tends to be the limit of what most gun games ask of us.

Receiver was unique in its genre. Yet when it comes to combo-heavy melee combat, most games are like *Receiver*. Yes, sure, you can run up to the baddies and just mash buttons hopefully, just as you could probably get pretty far in a modern-day FPS campaign by hitting everything with the butt of your gun. But to really succeed in a thirdperson brawler or fighting game, you have to disassemble, then reassemble, its combat system step by step. You have to work out which moves can be strung together, then finesse them into the fastest, most damaging combination. Alternatively, you could just spam light and heavy attacks at random until the credits have rolled, shrug your shoulders and walk away, wondering what all the fuss was about.

The sky-high skill ceiling of one of videogaming's oldest genres is in part a matter of necessity. The days when *Double Dragon* or *Turtles In Time* was king of the arcade, or when *Streets Of Rage* was the Mega Drive's must-have, are long gone, and the brawler is now largely a niche pursuit. Skilled players want a combat system of depth and tremendous complexity, and a game that will test them to the limit, so developers oblige. *OK KO! Let's Play Heroes* doesn't quite turn back the clock to 1990s levels of accessibility. But it does show how a balance can be struck, bringing flashy combos within reach of novice players, while still making them work for it.

It's telling that *Marvel Vs Capcom 3* is such an apparent influence on the game, since Capcom's crossover fighting series is actually a good deal easier to play than you might think. Yes, combo counts can easily reach triple figures in high-level play. But its controls are simple, arguably better suited to a gamepad than an arcade stick. It does not have timing windows; it has timing *chasms*, the game happy to read your intent rather than insist upon perfect execution. Its complexity comes from its team-building, its speed, and the difficulty of parsing what matters on a screen full of explosive chaos.

Let's Play Heroes seeks to do the same, but slows the action down, cleans the screen right up and does away entirely with the stress of team building. While you can only choose between two Powie Zowie moves at a time, you can cycle through all the available options during a fight with the shoulder buttons. And by binding them to cooldown timers that can be accelerated, rather than super meter that must be manually accrued, Capy eliminates the fear of wasting a combat system's most valuable resource.

And away from the Zowie component, KO's normal attacks are few, certainly, but also flexible enough to practically demand experimentation. They're unlocked gradually, in suggestive order. Once you've got to grips with the basics of knocking an opponent into the air then jumping up to carry on with the assault, you acquire an air dash. Could you...? Yes, you could, and you will.

The result is a brawler with stabilisers on, yes, but everyone has to start somewhere, and this is a game that proves the benefits of a fresh pair of eyes. A studio with no genre experience (at least in its back catalogue: clearly there are some fighting-game fans over there) has delivered an intricate, complex combat system that is easy to understand, and experiment with, and get better at. It's something from which the brawler, one of the most impenetrable genres in games, could learn a surprising amount. ■


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Lost Sphear

Centred on a plucky group seeking to revive lost places by summoning old memories, *Lost Sphear*'s story might seem a little on-the-nose coming from a studio whose raison d'etre seems to be just that. As with its wintry debut, *I Am Setsuna*, this is a consciously old-fashioned JRPG, designed to evoke fond feelings of a time before extravagant, fully voiced cutscenes and lavish presentation became the norm. It uses the same top-down camera as its predecessor, and also features a turn-based battle system with realtime elements. There's some shared terminology, too, and a melancholic undercurrent to its narrative. Yet if this spiritual successor of sorts has been pressed into a similar mould, it's not quite the production-line number it first appears – and not only because you have a party of four this time, rather than three.

The world's still blanketed in white, but it's not snow that's covering the ground; rather, a strange phenomenon is occurring whereby towns and villages are becoming 'lost' – replaced by a twinkling, empty space. It turns out that they're not so much gone as forgotten: the residual memories of these places have somehow attached themselves to nearby monsters, and only by defeating them can our heroes reinstate these settlements and their inhabitants.

In practical terms, that means guiding earnest protagonist Kanata and his growing party of allies from town to city to swamp to castle, defeating clusters of creatures while pulling the odd lever and hitting the occasional switch. Some of these monsters are subtly repurposed from *Setsuna*, but most are original designs. Indeed, it's a more visually diverse journey in general: though it lacks a distinctive aesthetic identity, it doesn't have the same problem where your next destination looks much like the last. The dungeons are structured in much the same way, but even from above the surroundings can be striking. There's a strong sense of foreboding when exploring a desolate ship graveyard, its wrecks linked by creaking gangplanks; by contrast, a mirrored lake at twilight is so beautiful you'll happily linger, splashing around in the shallows.

Not that you can afford to be idle when battle commences, of course. This time you're free to move your party around the battlefield, positioning them to launch close-range melee attacks or use special skills from a distance. Each attack's range is highlighted before you confirm your selection, letting you drop Kanata among a group of guards at the precise spot to ensure a cyclone attack hits them all, or drag rebel leader Sherra around to line up a magic bolt that can beguile a row of three razor-toothed penguins. Meanwhile, a momentum gauge steadily charges: once it's filled, you can land a second blow by pressing a button as you launch the first attack. Then again, waiting for the opportunity can potentially waste valuable seconds, unless you can complete your actions for the next party member as the first gets into position.

By default, monsters and cooldowns will pause when you're picking a move, a consumable or a target – though a fully active option is available for those keen to increase the pressure. We're not sure we'd recommend the latter for most players, since an erratic difficulty curve can see you survive one battle without a scratch, with the next leaving you at death's door. And though after a few hours you're given the use of mech suits to boost your attack power – and to unlock potentially devastating combination moves to ease you through the tougher fights – they're bound to an energy system so limited you can only realistically use them in emergencies. Eventually, you unlock the ability to refill the gauge at save-point markers and via consumables, but the latter are so rare, and so expensive, that you'll mostly resort to fighting on foot.

Yet just as it establishes these limitations, *Lost Sphear* also affords you room to impose your own playstyle on combat – and, cleverly, it's tied to how you redevelop its world. Though key locations are simply restored as they were, at other blank spaces across the map you can spend spare memories conjuring magical artifacts that have local or global effects. One might increase your momentum the more you move around in battle; conversely, another will boost your party's collective attack strength when they're in close proximity. Some are single-use, such as the Magic Eye that displays enemies' HP meters, though others can be placed in up to three locations to amplify their impact.

There are surprises in the storytelling, too, with one or two genuine shocks, even if one twist is so blindingly obvious you'll grow impatient at your team's inability to catch on. In fact, the cast seems to be permanently befuddled, with any narrative ambiguity hammered out during lengthy exchanges where everyone stops to explain the plot to one another. Still, if most genuine threats are swiftly resolved by deus ex machina, it often finds ways to meet the needs of the story while also developing characters organically. Imperial commander Galdra takes a lot of convincing to switch sides, and Sherra's understandable distrust of others doesn't miraculously vanish once she joins the group.

Yet you could say much the same for *I Am Setsuna*, and that didn't drag its heels to the degree this does, particularly in its final knockings. There's a little too much backtracking involved, and though a party-chat option offers curt reminders of your next objective, you're sometimes left meandering aimlessly. Eventually you come to feel less like you're changing the world so much as being given a half-finished jigsaw: there's a certain pleasure to slotting in the missing pieces, but completing the job can be a laborious process. **6**

Developer Tokyo RPG Factory
Publisher Square Enix
Format PC, PS4 (tested), Switch
Release Out now

There are surprises in the storytelling, with one or two genuine shocks, even if one twist is blindingly obvious



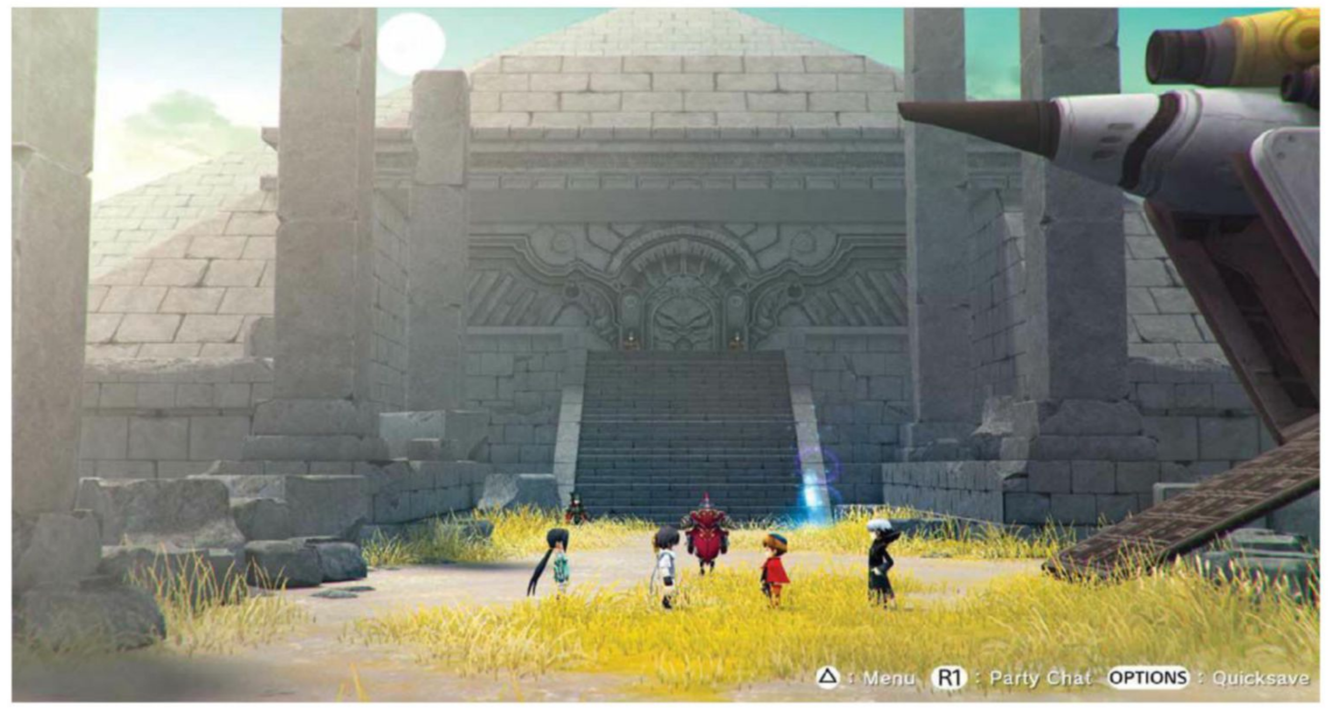
SPHEAR AND LOATHING

Lost Sphear's default difficulty is easygoing, but it's not shy of pulling out the cheapest tricks in the JRPG handbook. Bosses will suddenly revive when your skill points are depleted, and you're sometimes forced you to use benched party members whose weapons and armour mightn't have been upgraded for hours. One creature proves capable of inflicting several kinds of status effect, while regenerating health every turn; it also temporarily transforms into the characters you're using, so if you attack at this time you'll only harm yourself. Reduce its HP past a certain point and it'll automatically recover a huge chunk of it. Oh, and you're forced to do all this with a party of two. It's more annoying than difficult, really, but demanding specific tactics is silly when the freedom you're normally afforded is one of the game's strengths.

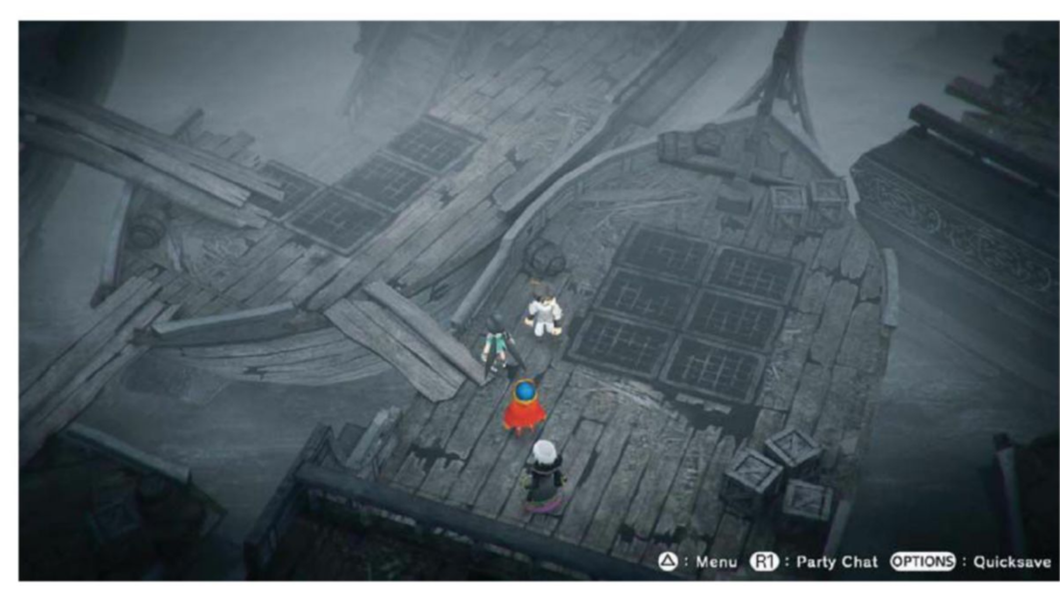




ABOVE With no random battles on the map you can explore at your leisure, picking up further memories from hot-spots. Each of these tall columns, meanwhile, can be activated to trigger the special ability for a mech suit



TOP Though party members level up even when they're not in your first team, you'll need to keep everyone's gear in reasonable nick in case you need to swap anyone back in – but that's rather a lot of effort when there are eight of you. MAIN Save points are common, and you can save anywhere on the world map, so you'll rarely have much ground to retread if your party falls during a boss battle. RIGHT While it's a mostly linear journey, you can sometimes visit places out of turn. An early trip to Shipsink here meant we were over-levelled for several hours



Arena Of Valor

Developer Timi Studio Group
Publisher Tencent
Format Android, iOS (tested)
Release Out now

Arena Of Valor succeeds at what it sets out to do, which is to make *League Of Legends* playable on your phone and tablet. Publisher Tencent has succeeded so completely, in fact, that it's only the mobile-friendly user interface that reveals which game is which. From its map to its set of modes to its environment art and even the specific garb of its endless waves of minions, *Arena Of Valor* is an egregiously close match for Riot's genre-defining free-to-play MOBA. The only reason this isn't a matter for the courts is that Tencent has wholly owned Riot since 2015, and is very unlikely to take legal action against itself.

Known as *Kings Of Glory* in China, this is already one of the most popular mobile games in the world. Tencent took the internet-cafe popularity of *League Of Legends* and reconfigured it for the most important gaming platform in Asia – mobile phones – which is about as surefire a bet as it is possible to make in today's game industry. It now arrives in the west as *Arena Of Valor*, an accessible free-to-play MOBA with striking production values.

This is a game that wears its business aims on its sleeve, but you do feel the benefit of the tremendous amount of money and platform expertise invested in its creation. When you first run the game you are taken through a step-by-step introduction to MOBA mechanics that is both faster and more thorough than many of its desktop counterparts. You're eased into your first competitive match quickly, and testing across multiple new accounts reveals this to be a breezy and rewarding introduction to the genre – so consistently breezy, in fact, that it's not out of the question that carefully-disguised bots are used in place of players for those vital, first-impression-forming games.

This is classic player-retention design, and certainly cynical, but it has the desired effect: *Arena Of Valor* is immediately playable and appealing. The well-designed UI successfully adapts a traditional mouse-and-keyboard control set for a touchscreen, and the game is enjoyable as an isometric brawler even without the strategic top layer of a MOBA. Your left thumb controls the movement of your character with an on-screen thumbstick, while your right triggers your characters' special abilities. Where most PC MOBA characters have four abilities, here you have three – two regular powers and an ultimate – and a larger button for regular attacks. Each of these uses auto-targeting to reduce the need for twitchy accuracy, but when your confidence grows you can also use an elegant drag-targeting system to set up more effective shots.

The need to return to base to buy stat-boosting items – a genre hallmark – has been removed, with a shopping list of appropriate choices automatically appearing when you collect enough gold. Cooldowns are much shorter than in a desktop MOBA, too, as are matches: a traditional five-on-five on a three-lane map will take between ten and 20 minutes, around half the time it takes to play a game of *League Of Legends*. It's possible to play entire rounds of some of the shorter modes in the time it can take to queue for a game of *Dota 2*. Even so, *Arena Of Valor* sessions are long by the standards of competitive mobile games; although inconvenient from time to time due to the penalties for quitting early, this also has the effect of making matches feel relatively substantial.

It's possible to spend a lot if you're impatient for power – a concern if you plan to take competition seriously

That this is a successful encapsulation of the MOBA experience is proven by the moments when you forget that you're playing a mobile game. Despite the truncated format, *Arena Of Valor* is still capable of dramatic team fights, cunning moments of map strategy and tense one-on-one duels that come down to pixel-perfect positioning and the effective timing of cooldown abilities. Coming out on top of these encounters feels great – and the reverse, when you're being wiped out by a vastly superior team in the game's unforgiving ranked mode, at least proves that there's a legitimate competitive ladder to climb.

Arena Of Valor is as generous as free-to-play games get, too. After unlocking your first two characters in the tutorial, new heroes are earned by playing three games in a given day for your first week or so with the game, until you have a collection of more than a dozen characters. There's also a rotating set of free heroes, and a constant stream of currency and unlockables earned through repeated logins and achievements. Meanwhile, an account-wide upgrade system called Arcana allows you to customise a loadout of collectable stat boosts. These are almost certainly detrimental to *Arena Of Valor*'s overall balance, but the boosts are so incremental that you wouldn't necessarily notice in the course of casual play. There's no doubt about the mindset that the game is trying to encourage here, and it's certainly possible to spend a lot if you're impatient for power – a concern if you plan to take competition seriously. With a more relaxed approach, though, it's fully possible to play without spending.

The game's character designs, however, are hugely forgettable. Female characters are either supermodels in Halloween costumes or children with pointy ears, and its men are flavourless tributes to Blizzard's fantasy art (and given that Blizzard's work is itself a flavourless tribute to 1980s Games Workshop, it's a miracle there's more here than a tennis ball with 'Tolkien' written on it). It's technically striking, sure – and looks and feels expensive – but it's creatively destitute. Case in point: Tencent shelled out for a soundtrack by Hans Zimmer, but you'd never be able to tell. That's the impression *Arena Of Valor* leaves on you. It's an easy game to play, and even enjoy, but a tough one to love.

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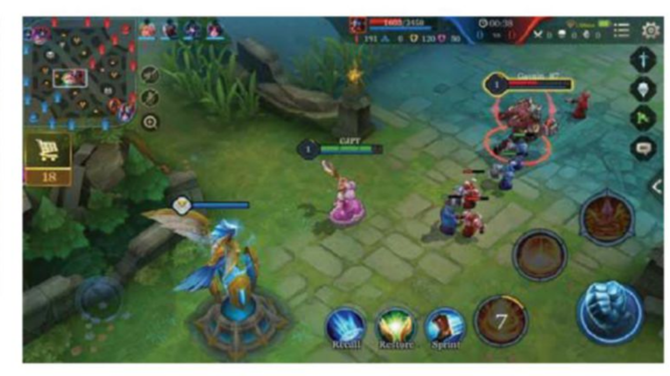
JUSTICE LEAGUE OF LEGENDS

There's little in *Arena Of Valor*'s bland character roster that is likely to make you double-take until you come across Batman, Superman and Wonder Woman. Awkwardly positioned among the game's anime-fantasy roster, the Justice League are some of the most expensive unlockable characters. Their presence is a strange consequence of Warner Bros' determination to increase awareness of its movie brands in China, where including characters in a game like *Kings Of Glory* via a Chinese partner company is both a way to appease the censors and an effective marketing move. These characters have now been re-imported to the west, although in this context they simply look out of place. Not to mention pricey – unless you grind to unlock them, they cost around £15 each.



LEFT A single-lane three-on-three mode is the fastest way to play, with games often finished within five minutes. As a straightforward skirmish, it's the best fit for *Arena Of Valor*'s lightweight formula. **BELOW** While auto-targeting is sufficient when you start playing, you'll eventually need to learn to start manually targeting spells. **MAIN** A ten player, single-lane mode with random heroes ensures a match-spanning melee with little by way of strategic considerations. As such, it's a good way to both try out new characters and to practice the finer details of a familiar hero





ABOVE Careful range control is key to winning individual lanes, forcing enemies to rely on the protection of their tower and preventing them from being useful elsewhere. Concealing shrubbery allows you to set up ambushes



Celeste

Partway through *Celeste*, our mountaineer protagonist Madeline suffers a panic attack. Luckily, her occasional climbing companion, the affable Theo, has a surefire method to calm her down. Visualise a feather, he says, and breathe in and out rhythmically – imagining that each breath out is keeping it airborne. Sure enough, it rises and falls as we push a button, and before long Madeline has regained her composure. That this comes after one of the game's most frustrating sequences doesn't appear to be accidental. The technique, it seems, is as much for the player's benefit as for its hero's.

That's because *Celeste* is one of *those* games: a pixel-art platformer that constantly teeters on the edge of a precipice, the finest of margins separating compulsion and frustration. And, boy, does designer Matt Thorson know it. It's obvious from the outset, when Madeline tells an old woman of her ambition to climb the titular peak, and the woman's mocking laughter follows her into the next screen. It's there, too, when Madeline smashes a mirror and a purple-haired doppelganger emerges – this is, essentially, her inner doubt, the part of her that suggests she should turn back. "Are you the weak part of me, or the lazy part?" Madeline grunts. "I'm the pragmatic part," her grinning double replies.

In our case, this merely makes us all the more keen to prove it wrong. At times, however, you'll question whether you really are going to make it, since *Celeste*'s challenge is as vertiginous as its peaks. Yet while it does occasionally tease that there's much worse to come, it knows when to give you an encouraging pat on the back, too. As your death counter rises, a postcard arrives, reminding you to be proud of it: these mistakes are part of the learning process, after all. "Keep going!" it insists, and so you do, even as you know poor Madeline is due for countless deathly plunges and impalements over the course of the subsequent chapter. After a while, in fact, we begin to wonder whether Thorson is pulling off some kind of devious psychological trick: are these messages, by turns hopeful and discouraging, coming just as we most need them?

These little narrative hooks are an incentive to keep climbing in and of themselves, helping set *Celeste* apart from its peers. The mountain gives you a tangible target to aim at, a far stronger incentive to reach the end than the more abstract concept of a final world. The game's environments change more than you'd think, keeping you on your toes as you wonder where Madeline's journey will take her next. This is a place of dark, treacherous caverns and windswept cliffs, naturally, but you'll also visit a hotel with a spectral concierge, a dark, labyrinthine temple and a cave of waterfalls and crystalline formations. Meanwhile, Madeline's precarious mental state becomes a mystery in its own right: the altitude might be playing a part, but the mountain seems to be bringing the demons in her head to life, and you'll be rooting for her to overcome them.

Developer Matt Thorson, Noel Berry
Publisher Matt Makes Games
Format PC (tested), PS4, Switch, Xbox One
Release Out now

She must conquer these challenges without pitons, crampons, or any kind of hiking gear. All Madeline has is a jump, a dash and the ability to scuttle up vertical surfaces as long as her grip holds. This is, miraculously, enough, though she'll occasionally need to rely on some environmental assistance: some platforms can be steered as she rides them, others shift across or up as you land or grip onto them, while floating bubbles shoot her in a direction of your choosing before popping.

The controls are exquisitely calibrated, giving you room to adjust your trajectory in mid-air

For the most part, these are single-screen challenges, beginning and ending with a patch of safe ground – or occasionally an exit – with an array of hazards in between. Sometimes even the safe places, well, aren't. Platforms triggered by a rush are either coated with jagged crystals or liable to shunt you into them. Some surfaces bristle with thin, red tendrils that expand into a deadly mass shortly after contact, forcing you to jump away. There are set-piece chases, too: Madeline's devilish double multiplies into a series of clones that copy your every move seconds later, while a boss tails you across multiple screens, sporadically lunging forward so you can't stay still for a moment.

There are times, too, when it takes its foot off the gas entirely, with puzzle-led sections that require careful exploration. An optional set of collectables – strawberries, oddly – lie mostly away from the critical path, as your reward for completing the most demanding gauntlets. Picking up the hovering fruit isn't enough; you'll need to touch down safely on solid ground afterwards to earn your prize. As another postcard reminds you, collecting them isn't mandatory: for patient players, this cunning bit of reverse psychology will make grabbing the lot an essential pursuit.

Even as the death count ticks towards four figures, most will keep trekking onward and upward. The controls are exquisitely calibrated, giving you room to adjust your trajectory in mid-air, and usually affording you some leeway when your timing isn't quite perfect. Still, a controller with a good D-pad is recommended, since digital control offers a level of essential precision that analogue can't; the difference between right and up-right can be the difference between life and death.

Inevitably, as with any climb, there are moments where its grip loosens, the most irritating example being the extended outdoor sections where powerful gusts of wind affect Madeline's momentum. It's here, where you feel like you're battling the controls rather than the environment, that *Celeste* threatens to get the better of you. And yet, like the rest of this game's most knuckle-whitening tests, when it's over, you'll let out such a deep sigh of satisfaction that your own imaginary feather will come down with snow on it.

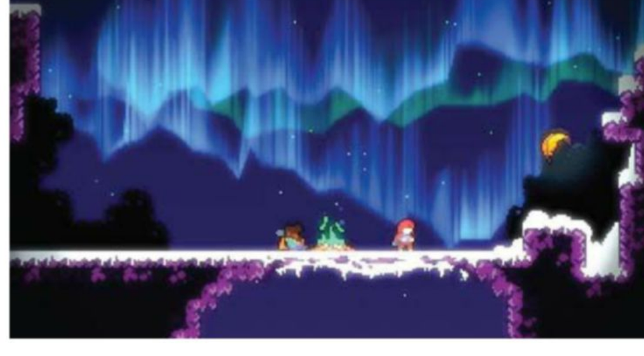
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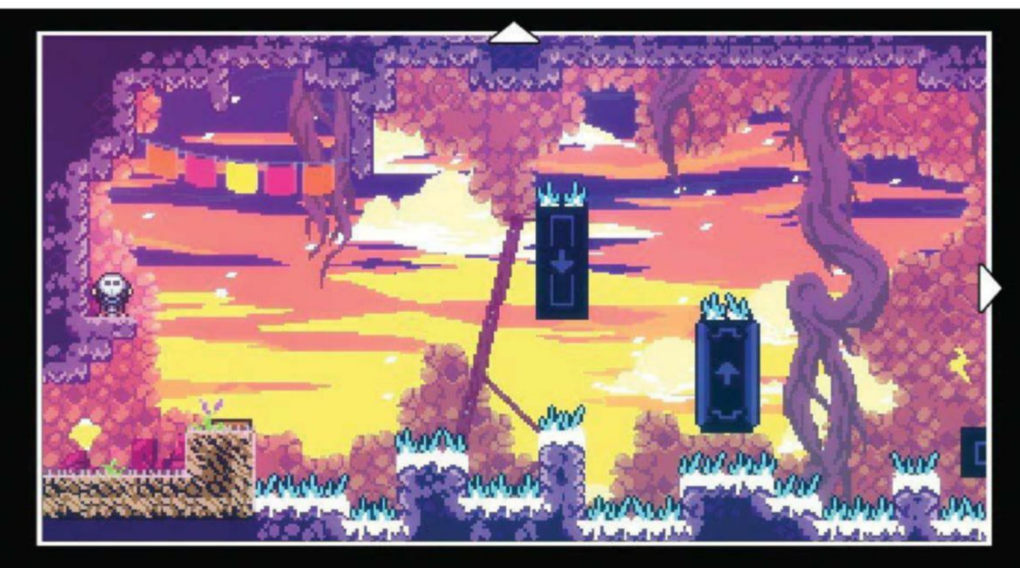
CASSETTE ERA
Behind breakable walls and hidden tunnels you'll find the game's toughest moments – or so you'll think. Tucked away within each chapter is a music tape, and you'll soon see why these are the most difficult collectables to reach. Grab one and you'll unlock a 'B-Side', a remix of the stage in which you found it, with new music and totally revamped layouts that make the original levels look simple. At the other end of the difficulty scale, there's an Assist mode that lets you drop the speed by up to half, give Madeline infinite air-dashes or even make her invincible. A warning recommends you not to enable these cheats on your first run, but it means those who succumb before they reach the top will still get the chance to look out from Celeste's summit.







ABOVE If tidying up a hotel doesn't sound like fun, *Celeste* finds a way to make it so. Clearing this cluttered hub requires you to stomp three pressure plates that lie beyond some more enjoyably devious obstacle courses



MAIN This set-piece asks you to carry a large crystal while pestered by floating enemies that rush at you on sight. It works as a change of tempo on your first run, but their unpredictable movements will surely catch out many a speedrunner.
ABOVE In a well-paced game with few longueurs, *Celeste* does invite you to rest awhile on one occasion. Here, you're presented with a touching reminder that the support of friends can help you through some of life's biggest tests.
LEFT Where challenges spread across more than one screen, or there's something of importance in the locality, you'll find these tower viewers. These allow you to scroll the display to a limited degree, allowing you to prepare accordingly

Finding Paradise

You may spend your first few hours in *Finding Paradise* wondering exactly what took so long. It's been six years since Kan Gao and Freebird Games' breakout hit *To The Moon*, and all signs point to this sequel following a very similar path. Once again you play as a pair of doctors from Sigmund Corp, a company with a compelling pitch: on your deathbed, they use technology to enter your mind and alter your memories to fulfil your dying wish or fix a lingering regret.

There are deviations from the formula, admittedly. In *To The Moon*, you had a reasonably straightforward task – helping a man achieve his lifelong dream of space travel. Here, things are a little more opaque. Colin Reeds hasn't been able to articulate what he wants Doctors Eva Rosalina and Neil Watts to do. Rather than gad about on a linear timeline in search of the point where they can make a single, life-altering change, the pair must flit back and forth throughout Reeds' life, searching not for the opportunity to change it, but for a clue as to what it is he really wants.

The process, however, plays out in much the same manner as before. You wander a stage searching for memories – little dialogue scenes that reward you with one of the orbs you need to move on. Once they've all been found, you must then identify a memento that's shared between two important moments in Reeds' life, allowing you to jump between them. The sliding-block sections from *To The Moon* are gone, in their place a friendlier kind of grid puzzle, but aside from that, and the nonlinear story, it's pretty much business as usual.

That means that, like its predecessor, *Finding Paradise* is a clunky old thing, and often a little inscrutable, leaving you no option but to approach and examine every object and piece of furniture in a scene until you stumble upon a way to advance the story. It's often achingly slow, too, with ponderous character movement leaving you pining for a run button.

That's fine, because it's an intriguing tale, its mystery and fuzzy chronology giving it a constant, momentum. Watts and Rosalina are still a wonderfully written duo who, even at their most silly or sarcastic, never lose their respect for their patient. And if the story itself doesn't quite deliver the emotional gut-punch of *To The Moon*, it imparts a stronger message, one that questions the very concept of SigCorp's USP. And Gao's wondrous score will fill in the gaps, its piano and strings lifting and swelling, grabbing you by the heartstrings and taking you with them at all the right moments. Maybe that's what took him six years to make a sequel. Whatever it was, the results reflect time thoroughly well spent.

8

Developer/publisher Freebird Games
Format PC
Release Out now



BLOCK AND KEY
The grid puzzles that you must complete in order to activate a memento are simple at first, asking that you match three of a kind on a 4x4 grid. Yet things grow steadily more complex. Red blockers appear that prevent you from moving a certain row or column; junctions change a tile's expected route; other hazards can cause blocks to disappear entirely from view. They're a little obtuse by game's end, but won't halt your progress for long, the small board size meaning that, if a solution can't be found, it can at least be fudged.

Colin Reeds' youth – and beyond – is defined by his friendship with Faye, a girl who lives across the street. She improvises a guitar accompaniment to the boy's clunky cello scales that becomes a recurring soundtrack motif



Brawlout

Angry Mob Games' multiplayer brawler isn't the first *Smash Bros* clone, nor will it be the last. But with every new game that attempts to mimic the formula, we gain new appreciation for Masahiro Sakurai and his team. The difference between the real thing and a pretender to its throne has rarely been more pronounced than it is here. Opportunistically rushed out for Switch in an attempt to cash in on the absence of its inspiration, *Brawlout* is, in every sense, a poor man's *Smash*.

At first, it appears to have the basics down. Character movement is swift and responsive, and the controls will be instantly familiar to anyone who's ever pitted Link against Captain Falcon on Final Destination with items turned off – this is aimed at a competitive audience, so don't expect any items or gimmicks at any time. It's just you and up to three opponents duking it out on plainly designed stages, attempting to launch one another off stage or screen until the last frog, ape or eagle standing is declared the victor.

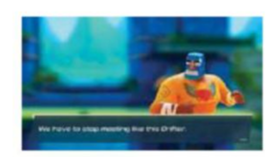
Its one big fundamental difference is undoubtedly a change for the worse. Though some characters have moves equivalent to a grab, there are no guards or throws. Angry Mob has replaced them with a rage meter that builds as you're hit: you can spend it when half-full to interrupt combos, or save it up to boost attack power. The total absence of a defensive game means aggression is everything. As such, figuring out your fighter's strongest attacks and then repeatedly spamming them is by far the most effective tactic. Perhaps not so much outside of local matches, mind, as the action stutters constantly online: about the best we can say for it is that everyone seems to be in the same boat.

Meanwhile, the offline game quickly becomes a tiresome grind. Just three arenas are available from the start: to unlock more you'll need to complete numerous battles with one character to unlock a single stage, and repeat the process for the rest. Two types of currency are handed out for completing battles, tutorials and daily objectives: you'll spend these smashing open piñatas, *Brawlout's* loot-box equivalent, for skins, avatar icons and the like. The most expensive ones earn you new fighters – there's no way to accelerate the process with real money, but given the miserly post-fight purse, that's not much of a mercy.

There are flashes of what might have been, but otherwise *Brawlout* doesn't feel so much a plucky underdog as a no-hoper, entering a fight it knows it can't win in the hope of a big payday just for showing up. A first-round stoppage to the champion, then, with the challenger being booed out of the ring.



Developer/publisher Angry Mob Games
Format PC, PS4, Switch (tested), Xbox One
Release Out now (PC, Switch), 2018 (PS4, Xbox One)

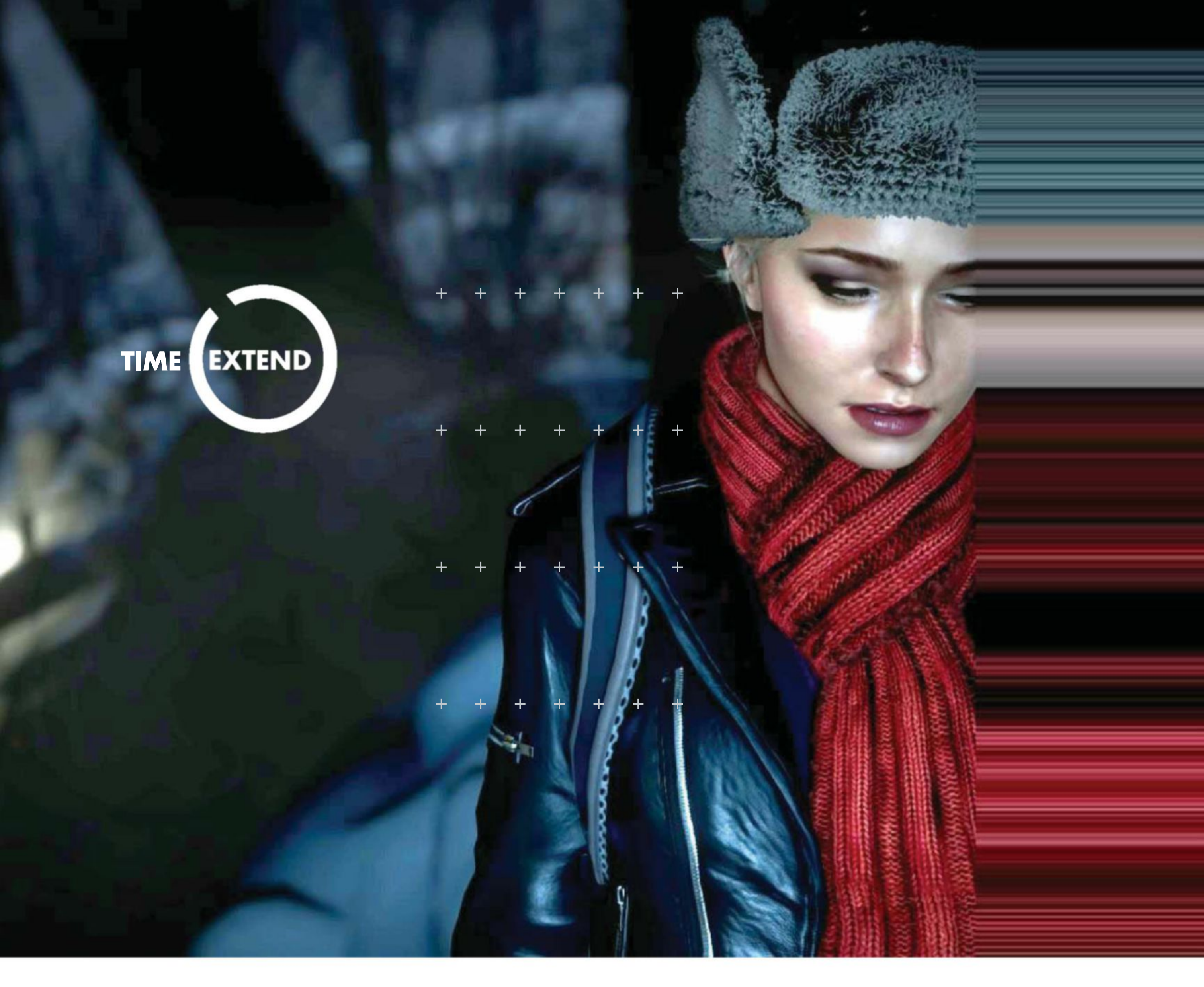


RUCK STARS

Though the various brawlers all handle appreciably differently, it's telling that the most memorable and distinctive character designs aren't the developer's own – the eponymous hero from Heart Machine's wonderful *Hyper Light Drifter* and *Guacamelee* protagonist Juan Aguacate being the clear standouts. In fact, the former seems hilariously overpowered, his rangy side-special doubling as a dash if you're too close to an opponent, letting you reposition for an easy hit. It's another irksome flaw in a game littered with them.

The three Arcade mode difficulties merely increase the number of opponents for each fight: one per round on Easy to three on Hard. It also features possibly the most feeble pre-fight trash talk we've ever seen





Until Dawn

How a schlocky teen horror confounded everyone's expectations

By Chris Schilling

Developer Supermassive Games **Publisher** SCE **Format** PS4 **Release** 2015

Until Dawn makes you wait a while before it springs its first big surprise. A masked psychopath has bound the bookish Ashley and the creepy Josh into a Saw-like deathtrap; as affable nerd Chris, you're forced to pick which one to save. Girlfriend or best friend? In any event, your choice doesn't seem to matter: the buzzsaw blade automatically heads towards Josh regardless, cutting him in two at the waist. It's the moment at which *Until Dawn* makes good on its promise that no one is safe – not least since the victim, played by Mr Robot star Rami Malek, is one of the cast's biggest names – and reminds you that choices don't always have the expected consequences. It's also, as it turns out, a total fake-out, the first shock of many in a game that rarely plays by the rulebook.

Then again, for a while, *Until Dawn* seemed to confound its makers, too. Initially planned as a comparatively limited, motion-controlled, firstperson horror game for PS3, things soon changed after its developer, Supermassive Games, took a demo build to Gamescom in 2012. An unexpectedly warm reception forced the studio to sit down with Sony and discuss making a Move-required title into something everyone could play, before development shifted to PS4. If on occasion the finished game bears the scars of its difficult birth, abandoning Move certainly paid off. Indeed, Supermassive knew it was on the right track when, two years later at Sony's PlayStation Experience showcase, an onstage demo saw a rowdy audience participating in each decision.

That's fitting for a game where you spend plenty of time simply watching events unfold. At times, you're made to feel like part of an audience on the opening weekend of a popular new horror film, where the usual code of conduct naturally extends to accommodate nervy laughter and screams at the inevitable popcorn-spilling jolts. Only this time, instead of shouting at the screen to encourage the witless protagonists to run or hide, you're often afforded the option to directly influence them.

Which can, of course, mean deliberately putting them in harm's way. At first, the most horrifying element of *Until Dawn* seems to be the characters themselves, a group of irritatingly self-absorbed teens who assemble at a cabin in the mountains for a party. Most of them fall into familiar archetypes: wannabe cheerleader Jess has recently hooked up with apparent jock Mike, former beau of the spiteful Emily, who's now coupled up with the sporty but submissive Matt in a rebound relationship seemingly designed to make her ex-squeeze jealous.

Matt aside, you'll likely be waiting for the first opportunity to send the others to their maker, but all reveal hidden depths. Jess is smarter and more resourceful than she makes out, her 'dumb blonde' routine merely an act to mask her insecurities. Mike similarly proves to be more likeable and capable than his profile would suggest. Even Emily belatedly proves her worth – and, in one particularly tense scene, where the group's fragile alliance is at its most precarious, she unexpectedly becomes the most sympathetic character of the lot.

In this instance, it's less about the writers wilfully misleading us about the characters' true nature, so much as establishing an early shorthand connection with them without resorting to extensive exposition. With a more luxurious running time than your average movie, it can then build upon – and subvert – those archetypes, without affecting the natural rhythms of a cabin-in-the-woods (as opposed to Cabin In The Woods) type of horror.

Given that it has eight hours, rather than 90 minutes, to fill, it's no surprise that *Until Dawn* heads in a different direction from the generic teen slasher as which it starts out. The arrival of the cannibalistic wendigo is the game's big second-act shift, by which time you'll have learned that not only are you spending the night in a cabin on top of a mountain in the dead of winter, but you're also next to a sanatorium within a site that has been cursed by a First Nations tribe. It's the kind of place that's unlikely to get beyond two stars on TripAdvisor.

If all that seems a little too much, there's a streak of tongue-in-cheek self-awareness throughout the script that means it gets away with such contrivances. In fact, it only works at all because it's so genre-literate, the recruitment of horror veterans

Graham Reznick and Larry Fessenden on script duties proving a masterstroke. Fessenden himself takes a plum role as another archetype: the kind of wild-eyed stranger whose unsettling behaviour would have most ordinary people alerting the authorities immediately, but who ultimately turns out to be entirely benevolent – until he's brutally decapitated, at any rate.

With hindsight, it feels less like a film and more like a Netflix series, made for bingeing in one or two sittings. The episodic feel is heightened by cliffhangers and weird interstitials, in which Peter Stormare, not so much chewing the scenery as taking great, greedy gobfuls of it, is cast as a psychiatrist more profoundly disturbed than any of his patients. How you respond to his questions can impact future frights: it's not exactly a new idea, but any game that borrows from scenes have been filmed; we simply have to choose which ones make it into the final cut.

If there's some confusion over the role you're playing, at least some of that is down to your own investment in the story. Even as they develop nuance, you may feel that these teens are unworthy of your help as they blunder headlong into danger; in which case, you can be the malicious audience willing them to their doom, deliberately

Ashley dislikes horror films, which might explain some of the terrible choices she makes. As with anyone else who survives the night, she'll be interviewed by a police officer over the credits, the dialogue changing according to the player's decisions

IT FEELS LESS LIKE A FILM AND MORE LIKE A NETFLIX SERIES, MADE FOR BINGEING IN ONE OR TWO SETTINGS

Silent Hill: Shattered Memories is looking in the right places for inspiration.

For all that *Until Dawn* wears its cinematic influences on its sleeve – from its chiaroscuro lighting, through the framing of its shots, with nods to the likes of Carpenter, Hitchcock and Raimi – it's equally in debt to Shinji Mikami and Makoto Shibata, its use of static camera angles deliberately evoking the early *Resident Evil* and *Project Zero* games. The difference here is that, where normally horror games cast us as a tremulous star or nervy chaperone, we're more frequently made to feel like the director. And given that we're only ever in control up to a point – characters' fates aren't necessarily predetermined, but their actions are often beyond the player's jurisdiction – at times it's like being placed in the editing suite. The script is done, the shaking the controller when you're supposed to keep it still to avoid detection. On the other hand, you can choose to be much more empathetic, doing your level best to keep all eight alive for the finale – though in some cases you might simply luck out, an unfortunate choice leading to an equally unfortunate demise.

Either way, you're never entirely in control, and that might just be the making of *Until Dawn*. Horror is, after all, partly contingent on a feeling of helplessness, but also surprise. As such, it's only right that your decisions should pay off in unexpected ways. The Josh fake-out might make you feel that it's all smoke and mirrors, not least as the reveal that he's still alive comes after a second deathtrap from which both participants survive. And yet your choice here can have serious ramifications: should

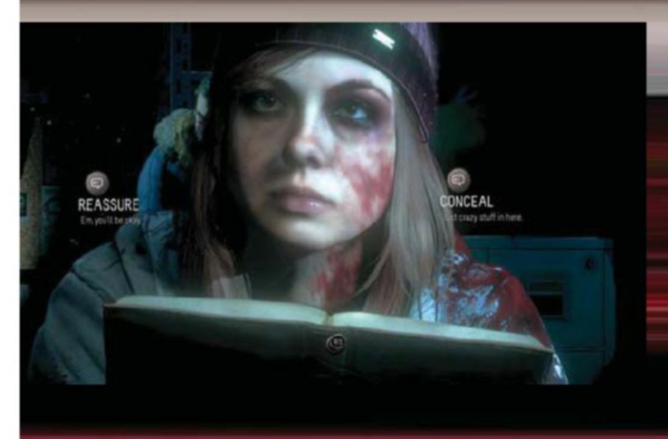


Collectable totems show a brief flash of potential events to come. They may give you hints that allow you to cheat death



WENDIGO PROPHECY

***Until Dawn* adds another string to its already laden bow with a series of underlying mysteries that mean players can assume yet another role – this time as an amateur detective. One involves the presence of the wendigo, which is tied to a 1950s mining incident and the local sanatorium, but you'll only be able to piece this together if you're careful and thorough while exploring. Another surrounds the events of the prologue, and the disappearance of Josh's two sisters, which proves the catalyst for his oddball behaviour: finding a single specific item can make a huge difference to Josh's fate in the climactic scenes. If you're simply looking to be scared, much of this can be ignored, but those seeking answers to every question are well rewarded for their sleuthing.**



Some choices ultimately result in similar outcomes, but you'll get additional dialogue or scenes to tie up any loose ends – as if you're watching an alternate cut with the deleted footage left intact

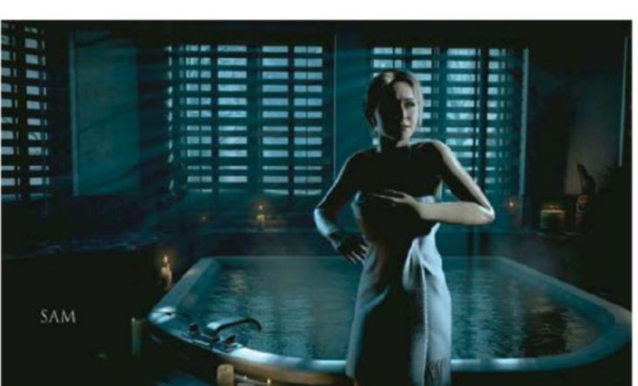
Chris opt to shoot Ashley with what turns out to be a blank-filled gun, there's a good chance she won't help her would-be beau when he most needs it later on.

There's also something quietly irresistible about the tangible recognition that you're meddling with fate's designs. *Until Dawn* is honest about its mechanical underpinnings, acknowledging the potential 'butterfly effect' of each decision in text form at the top-left of the screen. It's the equivalent of Telltale's '[character] will remember that', but with these stakes you're left anxiously wondering just how you might have changed the future. Has the fragile bond between two characters just been broken? Have you inadvertently doomed someone? The questions raised only heighten the unfolding mystery and give you a deeper, more nourishing sense of involvement. And yet you can still just play it like a schlocky horror, ignoring the rest of it and simply letting the chips – and the bodies – fall where they may.

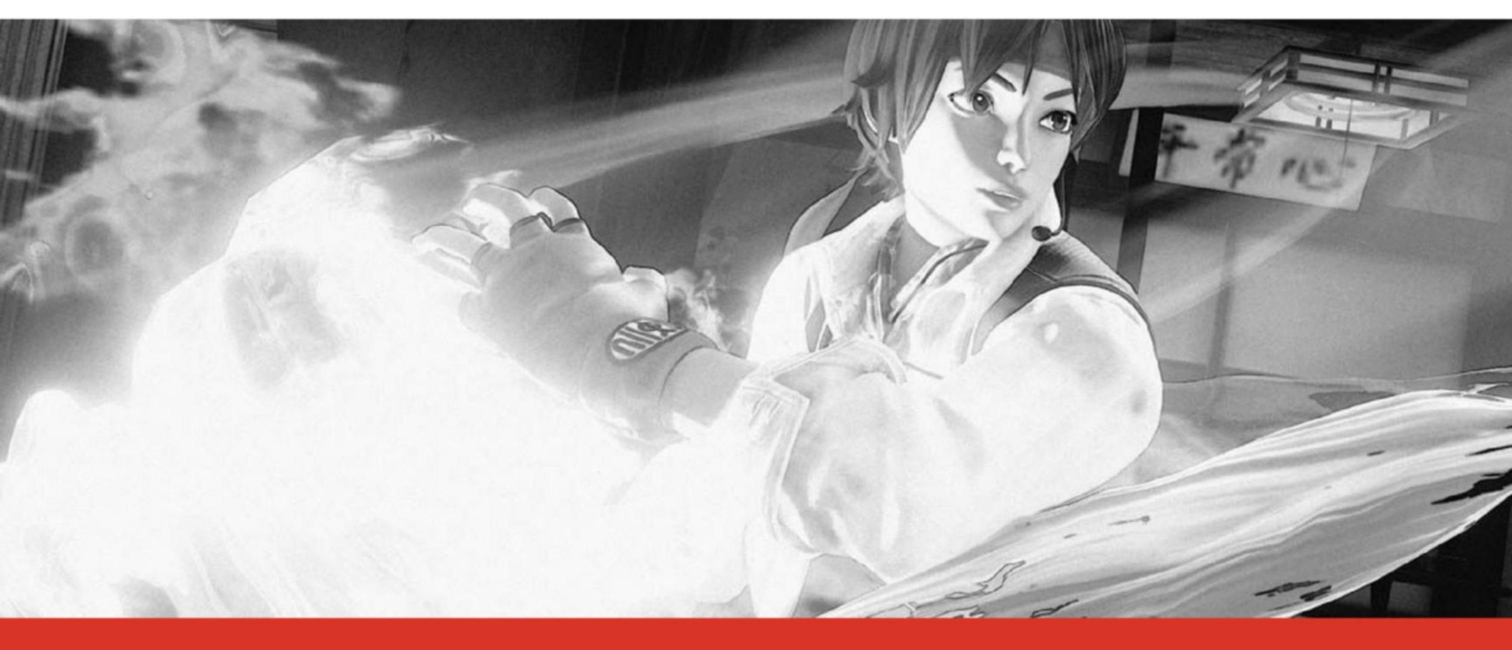
Either way, it's far from the game that many were expecting – including, or so the evidence would suggest, its publisher. Certainly, it's clear Sony was anxious about the response, unceremoniously dumping it out in August with little publicity when it seemed made for a big Hallowe'en weekend push. Still, an inevitable early price drop and its deserved popularity among streamers raised its profile, such that Sony has twice returned to the well. Lightgun spin-off *Rush Of Blood* didn't ostensibly have much in common with its predecessor, though that's not the case for unsettling prequel *The Inpatient*. And its success surely had a part in inspiring Sony's PlayLink line: in fact, this seems a far better fit for a communal, often combative smartphone-controlled game than Supermassive's own *Hidden Agenda*.

It's a pity Sony didn't have more faith in *Until Dawn*, but it's fitting that it found its audience: this is, after all, a crowd-pleaser at heart, and while it may not be high art, its makers – and, for that matter, its cast – treat its silly conceit with laudable seriousness. Beyond all that, it's simply rollicking good fun: a funny, jumpy horror flick with bite. As Josh says to his unnerved friends when he pulls off his psycho mask, "It's good to get the heart racing every now and then, right?" He might have been a little crazy, but the man has a point. ■

As the 'final girl', Hayden Panettiere's Sam will survive regardless of the decisions you make – at least until the climactic escape, when her plot armour disappears



A progress report on the games we just can't quit



Street Fighter V

Developer/publisher Capcom **Format** PC, PS4 **Release** 2016

Do we really need to rake over the coals of *Street Fighter V*'s awful launch again? Features not working or missing entirely, promises either half-delivered or flat-out broken – you've heard it all before, if not about this then some other game.

Capcom has, to its credit, worked carefully to mend first the game, and then its own reputation. A planned premium currency, Zenny, was postponed while the publisher got its house in order, and later dropped entirely. The Capcom Fighters Network, an in-house matchmaking tool that would power crossplatform play between PC and PS4, was kept in beta and quietly rebuilt behind the scenes.

Yet Capcom's good work has been undermined somewhat by its insistence on sticking to its business plan – and the lingering suspicion that abandoning the real-money Zenny has made it more avaricious elsewhere. Costumes and stages arrive at a clip, and are outrageously priced, the cost of owning it all running well into triple figures. That Capcom has escaped too much public censure is more a measure of the game's lack of popularity outside the fighting-game scene than anything else. No one really seems to care.

A reboot was required, then, which is a bit awkward when you've spent most of your PR campaign loudly trumpeting that this is the only version of *SFV* you'll ever need to buy. To sidestep that, *SFV: Arcade Edition* is free to existing owners, with a paid version bundling the first two seasons' worth of DLC characters, and giving players in every group new things to do.

Heading the list is Arcade mode, that most basic of fighting-game features. It's split into multiple sub-modes, each tied in to an old version of *Street Fighter* – pick the *Alpha* path, say, and you'll only face AI opponents who hail from that game. Solo players can also enter Extra Battle, which costs in-game Fight Money to enter, and pays out cosmetic items. You can invite some friends round for a three-on-three Team Battle – though, infuriatingly, it can't be played online.

For the hardcore, the most crucial addition is a thorough rebalancing of the battle system (that also gives every character a second V-Trigger). Whether the finer tweaks will redress the balance of a game that has overwhelmingly favoured constant, thoughtless attacking play remains to be seen; the coming season of Capcom Cup – the only aspect of *Street Fighter V* that has worked as intended since the start – will be telling, and will define, more than any new modes, moves or features, whether *Street Fighter V* will become the game we were originally promised. ■


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